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THE ENCYCLOPÆDIA BRITANNICA

A DICTIONARY OF ARTS, SCIENCES, LITERATURE AND GENERAL **INFORMATION**

ELEVENTH EDITION

VOLUME III

AUSTRIA LOWER to BISECTRIX

[E-Text Edition of Volume III - Part 1 of 2, Slice 3 of 3 - BANKS to **BASSOON**

[v.03 p.0333] BANKS, GEORGE LINNAEUS (1821-1881), British miscellaneous writer, was born at Birmingham on the 2nd of March 1821. After a brief experience in a variety of trades, he became at the age of seventeen a contributor to various newspapers, and subsequently a playwright, being the author of two plays, a couple of burlesques and several lyrics. Between 1848 and 1864 he edited in succession a variety of newspapers, including the Birmingham Mercury and the Dublin Daily Express, and published several volumes of miscellaneous prose and verse. He died in London on the 3rd of May 1881.

> BANKS, SIR JOSEPH, BART. (1743-1820), English naturalist, was born in Argyle Street, London, on the 13th of February 1743. His father, William Banks, was the son of a successful Lincolnshire doctor, who became sheriff of his county, and represented Peterborough in parliament; and Joseph was brought up as the son of a rich man. In 1760 he went to Oxford, where he showed a decided taste for natural science and was the means of introducing botanical lectures into the university. In 1764 he came into possession of the ample fortune left by his father, and in 1766 he made his first scientific expedition to Newfoundland and Labrador, bringing back a rich collection of plants and insects. Shortly after his return, Captain Cook was sent by the government to observe the transit of Venus in the Pacific Ocean, and Banks, through the

influence of his friend Lord Sandwich, obtained leave to join the expedition in the "Endeavour," which was fitted out at his own expense. He made the most careful preparations, in order to be able to profit by every opportunity, and induced Dr Daniel Solander, a distinguished pupil of Linnaeus, to accompany him. He even engaged draughtsmen and painters to delineate such objects of interest as did not admit of being transported or preserved. The voyage occupied three years and many hardships had to be undergone; but the rich harvest of discovery was more than adequate compensation. Banks was equally anxious to join Cook's second expedition and expended large sums in engaging assistants and furnishing the necessary equipment; but circumstances obliged him to relinquish his purpose. He, however, employed the assistants and materials he had collected in a voyage to Iceland in 1772, returning by the Hebrides and Staffa. In 1778 Banks succeeded Sir John Pringle as president of the Royal Society, of which he had been a fellow from 1766, and held the office until his death. In 1781 he was made a baronet; in 1795 he received the order of the Bath; and in 1797 he was admitted to the privy council. He died at Isleworth on the 19th of June 1820. As president of the Royal Society he did much to raise the state of science in Britain, and was at the same time most assiduous and successful in cultivating friendly relations with scientific men of all nations. It was, however, objected to him that from his own predilections he was inclined to overlook and depreciate the labours of the mathematical and physical sections of the Royal Society and that he exercised his authority somewhat despotically. He bequeathed his collections of books and botanical specimens to the British Museum. His fame rests rather on what his liberality enabled other workers to do than on his own achievements.

See J. H. Maiden, Sir Joseph Banks (1909).

BANKS, NATHANIEL PRENTISS (1816-1894), American politician and soldier, was born at Waltham, Massachusetts, on the 30th of January 1816. He received only a common school education and at an early age began work as a bobbin-boy in a cotton factory of which his father was superintendent. Subsequently he edited a weekly paper at Waltham, studied law and was admitted to the bar, his energy and his ability as a public speaker soon winning him distinction. He served as a Free Soiler in the Massachusetts house of representatives from 1849 to 1853, and was speaker in 1851 and 1852; he was president of the state Constitutional Convention of 1853, and in the same year was elected to the national House of Representatives as a coalition candidate of Democrats and Free Soilers. Although re-elected in 1854 as an American or "Know-Nothing," he soon left this party, and in 1855 presided over a Republican convention in Massachusetts. At the opening of the Thirty-Fourth Congress the anti-Nebraska men gradually united in supporting Banks for speaker, and after one of the bitterest and most protracted speakership contests in the history of congress, lasting from the 3rd of December 1855 to the 2nd of February 1856, he was chosen on the 133rd ballot. This has been called the first national victory of the Republican party. Re-elected in 1856 as a Republican, he resigned his seat in December 1857, and was governor of Massachusetts from 1858 to 1861, a period marked by notable administrative and educational reforms. He then succeeded George B. McClellan as president of the Illinois Central railway. Although while governor he had been a strong advocate of peace, he was one of the earliest to offer his services to President Lincoln, who appointed him in 1861 major-general of volunteers. Banks was one of the most prominent of the volunteer officers. When McClellan entered upon his Peninsular Campaign in 1862 the important duty of defending Washington from the army of "Stonewall" Jackson fell to the corps commanded by Banks. In the spring Banks was ordered to move against Jackson in the Shenandoah Valley, but the latter with superior forces defeated him at Winchester, Virginia, on the 25th of May, and forced him back to the Potomac river. On the 9th of August Banks again encountered Jackson at Cedar Mountain, and, though greatly outnumbered, succeeded in holding his ground after a very sanguinary battle. He was later placed in command of the garrison at Washington, and in November sailed from New York with a strong force to replace General B. F. Butler at New Orleans as commander of the Department of the Gulf. Being ordered to co-operate with Grant, who was then before Vicksburg, he invested the defences of Port Hudson, Louisiana, in May 1863, and after three attempts to carry the works by storm he began a regular siege. The garrison surrendered to Banks on the 9th of July, on receiving word that Vicksburg had fallen. In the autumn of 1863 Banks organized a number of expeditions to Texas, chiefly for the purpose of preventing the French in Mexico from aiding the Confederates, and secured possession of the region near the mouths of the Nueces and the Rio Grande. But his Red River expedition, March-May 1864, forced upon him by superior authority, was a complete failure. In August 1865 he was mustered out of the service, and from 1865 to 1873 he was again a representative in congress, serving as chairman of the committee on foreign affairs. A personal quarrel with President Grant led in 1872, however, to his joining the Liberal-Republican revolt in support of Horace Greeley, and as the Liberal-Republican and Democratic candidate he was defeated for re-election. In 1874 he was successful as a Democratic candidate, serving one term (1875-1877). Having rejoined the Republican party in 1876, he was United States marshal for Massachusetts from 1879 until 1888, when for the ninth time he was elected to Congress. He retired at the close of his term (1891) and died at Waltham on the 1st of September 1894.

BANKS, THOMAS (1735-1805), English sculptor, son of a surveyor who was land steward to the duke of Beaufort, was born in London on the 29th of December 1735. He was taught drawing by his father, and in 1750 was apprenticed to a wood-carver. In his spare time he worked at sculpture, and before 1772, when he obtained a travelling studentship and proceeded to Rome, he had already exhibited several fine works. Returning to England in 1779 he found that the taste for classic poetry, ever the source of his inspiration, no longer existed, and he spent two years in St Petersburg, being employed by the empress Catherine, who purchased his "Cupid tormenting

a Butterfly." On his return he modelled his colossal "Achilles mourning the loss of Briseis," a work full of force and passion; and thereupon he was elected, in 1784, an associate of the Royal Academy and in the following year a full member. Among other works in St Paul's cathedral are the monuments to Captain Westcott and Captain Burges, and in Westminster Abbey to Sir Eyre Coote. His bust of Warren Hastings is in the National Portrait Gallery. Banks's best-known work is perhaps the colossal group of "Shakespeare attended by Painting and Poetry," now in the garden of New Place, Stratford-on-Avon. He died in London on the 2nd of February 1805.

[v.03 p.0334]

BANKS AND BANKING. The word "bank," in the economic sense, covers various meanings which all express one object, a contribution of money for a common purpose. Thus Bacon, in his essay on *Usury*, while explaining "how the discommodities of it may be best avoided and the commodities retained," refers to a "bank or common stock" as an expression with which his readers would be familiar. Originally connected with the idea of a mound or bank of earth—hence with that of a *monte*, an Italian word describing a heap—the term has been gradually applied to several classes of institutions established for the general purpose of dealing with money.

The manner in which a bank prospers is explained by David Ricardo, in his *Proposals for an Economical and Secure Currency*, in a passage where he tells us that a bank would never be established if it obtained no other profits but those derived from the employment of its own capital. The real

Banking as a

advantage of a bank to the community it serves commences only when it employs the capital of others. The money which a bank controls in the form of the deposits which it receives and sometimes of the notes which it issues, is loaned out by it again to those who desire to borrow and can show that they may be trusted. A bank, in order to carry on business successfully, must possess a sufficient capital of its own to give it the standing which will enable it to collect capital belonging to others. But this it does not hoard. It only holds the funds with which it is entrusted till it can use them, and the use is found in the advances that it makes. Some of the deposits merely lie with the bank till the customer draws what he requires for his ordinary everyday wants. Some, the greater part by far, of the deposits enable the bank to make advances to men who employ the funds with which they are entrusted in reproductive industry, that is to say, in a manner which not only brings back a greater value than the amount originally lent to them, but assists the business development of the country by setting on foot and maintaining enterprises of a profitable description. It is possible that some part may be employed in loans required through extravagance on the part of the borrower, but these can only be a small proportion of the whole, as it is only through reproductive industry that the capital advanced by a banker can really be replaced. A loan sometimes, it is true, is repaid from the proceeds of the sale of a security, but this only means a transfer of capital from one hand to another; money that is not transferred in this way must be made by its owner. Granted that the security is complete, there is only one absolute rule as to loans if a bank desires to conduct its business on safe lines, that the advance should not be of fixed but of floating capital. Nothing seems simpler than such a business, but no business requires closer attention or more strong sense and prudence in its conduct. In other ways also, besides making loans, a well-conducted bank is of much service to the business prosperity of a country, as for example by providing facilities for the ready transmission of money from those who owe money to those to whom it is due. This is particularly obvious when the debtor lives in one town or district and the creditor in another at a considerable distance, but the convenience is very great under any circumstances. Where an easy method of transmission of cash does not exist, we become aware that a "rate of exchange" exists as truly between one place and another in the same country as between two places in different countries. The assistance that banking gives to the industries of a community, apart from these facilities, is constant and most valuable.

may pass on to a sketch of the history of modern banking. Banks in Europe from the 16th century onwards may be divided into two classes, the one described as "exchange banks," the other as "banks of deposits." These last are banks which, besides receiving deposits, make loans, and thus associate themselves with the trade and general industries of a country. The exchange banks included in former years institutions like the Bank of Hamburg and the Bank of Amsterdam. These were established to deal with foreign exchange and to facilitate trade with other countries. The others—founded at very different dates—were established as, or early became, banks of deposit, like the Bank of England, the Bank of Venice, the Bank of Sweden, the Bank of France, the Bank of Germany and others. Some reference to these will be made later. The exchange banks claim the first attention.

Important as they were in their day, the period of their activity is now generally past, and the

With these preliminary remarks on some main features of the business, we

interest in their operations has become mainly historical.

In one respect, and that a very important one, the business carried on by the exchange banks differed from banking as generally understood at the present time. No exchange bank had a capital of its own nor did it require any for the performance of the business. The object for which exchange banks were established was to turn the values with which they were entrusted into "current money," "bank money" as it was called, that is to say, into a currency which was accepted immediately by merchants without the necessity of testing the value of the coin or the bullion brought to them. The "value" they provided was equal to the "value" they received, the only difference being the amount of the small charge they made to their customers, who gained by dealing with them more than equivalent advantages.

Short notices of the Bank of Amsterdam, which was one of the most important, and of the Bank of

Hamburg, which survived the longest, its existence not terminating till 1873, will suffice to explain the working of these institutions.

The Amsterdamsche Wisselbank, or exchange bank, known later as the Bank of Amsterdam, was established by the ordinance of the city of Amsterdam of 31st January 1609. The increased commerce of Holland, which made Amsterdam a leading city in international dealings, led to the establishment of this bank, to which any person might bring money or bullion for deposit, and might withdraw at pleasure the money or the worth of the bullion. The ordinance which established the bank further required that all bills of 600 gulden (£50), or upwards—this limit was, in 1643, lowered to 300 gulden (£25)—should be paid through the bank, or in other words, by the transfer of deposits or credits at the bank. These transfers came afterwards to be known as "bank money." The charge for making the transfers was the sole source of income to the bank. The bank was established without any capital of its own, being understood to have actually in its vaults the whole amount of specie for which "bank money" was outstanding. This regulation was not, however, strictly observed. Loans were made at various dates to the Dutch East India Company. In 1795 a report was issued showing that the city of Amsterdam was largely indebted to the bank, which held as security the obligations of the states of Holland and West Friesland. The debt was paid, but it was too late to revive the bank, and in 1820 "the establishment which for generations had held the leading place in European commerce ceased to exist." (See Chapters on the Theory and History of Banking, by Charles F. Dunbar, p. 105.)

Similar banks had been established in Middelburg, (March 28th, 1616), in Hamburg (1619) and in Rotterdam (February 9th, 1635). Of these the Bank of Hamburg carried on much the largest business and survived the longest. It was not till the 15th of February 1873 that its existence was closed by the act of the German parliament which decreed that Germany should possess a gold standard, and thus removed those conditions of the local medium of exchange—silver coins of very different intrinsic values—whose circulation had provided an ample field for the operations of the bank. The business of the Bank of Hamburg had been conducted in absolute accordance with the regulations under which it was founded.

The exchange banks were established to remedy the inconvenience to which merchants were subject through the uncertain value of the currency of other countries in reference to that of the city where the exchange bank carried on its business. The following quotation from Notes on Banking, written in 1873, explains the method of operation in Hamburg. "In this city, the most vigorous offshoot of the once powerful Hansa, the latest representative of the free commercial cities of medieval Europe, there still remains a representative of those older banks which were once of the highest importance in commercial affairs. Similar institutions greatly aided the prosperity of Venice, Genoa, Amsterdam and Nuremberg. The Bank of Hamburg is now the last survivor of these banks, whose business lay in the assistance of commerce, not by loans, but by the local manufacture, so to speak, of an international coinage. In a city of the highest rank of commercial activity, but greatly circumscribed in territory, continually receiving payments for merchandise in the coin of other countries, a common standard of value was a matter of primary necessity. The invention of bank money, that is, of a money of account which could be transferred at pleasure from one holder to another, enabled the trade of the place to be carried on without any of those hindrances to business which must have followed on the delay and expense attendant on the verification of various coins differing from each other in weight, intrinsic value, standard of purity of metal, in every point in fact in which coins can differ from each other. By supplying a currency of universal acceptation the Bank of Hamburg greatly contributed to the prosperity of that city." The regulations being strictly carried out, the currency was purely metallic; the "Mark Banco" being merely the representative of an equal value of silver.

For the earliest example of a bank for the receipt of deposits carrying on a business on modern lines, we must turn, as in the case of the exchange banks, to a great commercial city of the middle ages. Private banking in Venice began as an adjunct of the business of the *campsores* or dealers in foreign moneys. "As early as 1270 it was deemed necessary to require them to give security to the government as the condition of carrying on their business, but it is not shown that they were then receiving deposits. In an act of the 24th of September 1318, however, entitled *Bancherii scriptae dent plegiarias consulibus*, the receipt of deposits by the *campsores* is recognized as an existing practice, and provision is made for better security for the depositors." From this act it becomes clear that between 1270 and 1318 the money-changers of Venice were becoming bankers, just as the same class of men became in Amsterdam a couple of centuries later, and as later still the goldsmiths in London.

Of the early banks in Europe, the bank in Venice, the Banco di Rialto, was established by the acts of the Venetian senate of 1584 and 1587. This appears to have been the first public bank in that city and in Europe. The

The first public bank in Europe.

appears to have been the first public bank in that city and in Europe. The senate by the act of the 3rd of May $1619^{[1]}$ established by the side of the Banco di Rialto a second public bank known as the Banco Giro, or Banco del Giro, which ultimately became the only public bank of the city and was for generations famous throughout Europe as the Bank of Venice. Earlier than this the *campsores* or dealers in foreign moneys had carried on the business. The Bank of Venice (Banco del Giro) appears to have been called into existence by the natural developments of trade, but some banks have been established by governments and have been of great service to the development of the countries in which they have carried on their business. Of these, the Bank of Sweden (the *Riksbank*), established in 1656, is the earliest. This bank still exists and has always been the state bank of Sweden. It was founded by a Swede named Palmstruck, who also invented the use of the bank note—perhaps

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adapted for use in Europe is the better expression to employ, as notes were current in China about A.D. 800. The first bank note was issued by the *Riksbank* in 1658. An *enquête* made by the French government in 1729 recognizes the priority of Sweden in this matter, and declares the bank note to be an admirable Swedish invention, designed to facilitate commerce.

EUROPEAN COUNTRIES

United Kingdom.—English banking may be traced back to the dealings in money carried on by the goldsmiths of London and thus certainly to the 16th century; but it has been so greatly influenced by the working of the Bank of England and by the acts of parliament connected with that institution, that a reference to this bank's foundation and development must precede any attempt at a detailed history of banking in the United Kingdom. The Bank of England was founded in

1694.^[2] As in the case of some of the earlier continental banks, a loan to the government was the origin of its establishment. The loan, which was £1,200,000, was subscribed in little more than ten days, between Thursday, 21st June, and noon of Monday, 2nd July 1694. On Tuesday, 10th July, the subscribers appointed Sir John Houblon the governor, and Michael Godfrey (who was killed during the siege of Namur on the 17th of July 1695) deputy-governor. Michael Godfrey wrote a pamphlet explaining the purposes for which the bank was established and the use it would be to the country. The pamphlet supplies some curious illustrations of the dangers which some persons had imagined might arise from the establishment of the bank and its connexion with William III., deprecating the fear "lest it should hereafter joyn with the prince to make him absolute and so render parliaments useless."

The governor and the deputy-governor, having thus been appointed, the first twenty-four directors were elected on Wednesday, 11th July 1694. Two of them were brothers of the governor, Sir John Houblon. They were descended from James Houblon, a Flemish refugee who had escaped from the persecution of Alva. All the directors were men of high mercantile standing. The business of the bank was first carried on in the Mercers' chapel. It continued there till the 28th of September, when they moved to Grocers' Hall. They were tenants of the Grocers' Hall till 1732. The first stone of the building now occupied by the bank was laid on the 1st of August 1732. The bank has remained on the same site ever since. The structure occupied the space previously covered by the house and gardens of Sir John Houblon, the first governor, which had been bought for the purpose. Between 1764 and 1788 the wings were erected. In 1780 the directors, alarmed at the dangerous facilities which the adjacent church of St Christopher le Stocks might give to a mob, obtained parliamentary powers and acquired the fabric, on the site of which much of the present building stands. The structure was developed to its present form about the commencement of the 19th century.

The bank commenced business with fifty-four assistants, the salaries of whom amounted to £4350. The total number employed in 1847 was upwards of nine hundred and their salaries exceeded £210,000. Mr Thomson Hankey stated that in 1867 upwards of one thousand persons were employed, and the salaries and wages amounted to nearly £260,000, besides pensions to superannuated clerks of about £20,000 more. The number of persons of all classes employed in 1906 (head office and eleven branches) was about 1400.

Originally established to advance the government a loan of £1,200,000, the management of the British national debt has been confided to the Bank of England from the date of its foundation, and it has remained the banker of the government ever since. The interest on the stock in which the debt is inscribed has always been paid by the bank, originally half-yearly, now quarterly, and the registration of all transfers of the stock itself is carried on by the bank, which assumes the responsibility of the correctness of these transfers. The dignity which the position of banker to the government gives; the monopoly granted to it of being the only joint-stock bank allowed to exist in England and Wales till 1826, while the liability of its shareholders was limited to the amount of their holdings, an advantage which alone of English banks it possessed till 1862; the privilege of issuing notes which since 1833 have been legal tender in England and Wales everywhere except at the bank itself; the fact that it is the banker of the other banks of the country and for many years had the control of far larger deposits than any one of them individually—all these privileges gave it early a pre-eminence which it still maintains, though more than one competitor now holds larger deposits, and though, collectively, the deposits of the other banks of the country which have offices in London many times overpass its own. Some idea of the strength of its position may be gained from the fact that stocks are now inscribed in the bank books to an amount exceeding 1250 millions sterling.

[v.03 p.0336]

In one sense, the power of the Bank of England is greater now than ever. By the act of 1844, regulating the note-issue of the country, the Bank of England became the sole source from which legal tender notes can be obtained; a power important at all times, but pre-eminently so in times of pressure. The authority to supply the notes required, when the notes needed by the public exceed in amount the limit fixed by the act of 1844, was granted by the government at the request of the bank on three occasions only between 1844 and 1906. Hence the Bank of England becomes the centre of interest in times of pressure when a "treasury letter" permitting an excess issue is required, and holds then a power the force of which can hardly be estimated.

One main feature of the act of 1844 was the manner in which the issue of notes was dealt with, as described by Sir Robert Peel in parliament on the 6th of May 1844:—"Two departments of the bank will be constituted: one for the issue of notes, the other for the transaction of the ordinary

business of banking. The bullion now in the possession of the bank will be transferred to the issue department. The issue of notes will be restricted to an issue of £14,000,000 upon securities—the remainder being issued upon bullion and governed in amount by the fluctuations in the stock of bullion." The bank was required to issue weekly returns in a specified form (previously to the act of 1844 it was necessary only to publish every month a balance-sheet for the previous quarter), and the first of such returns was issued on the 7th of September 1844. The old form of return contained merely a statement of the liabilities and assets of the bank, but in the new form the balance-sheets of the Issue Department and the Banking Department are shown separately. A copy of the weekly return in both the old and new forms will be found in *A History of the Bank of England*, p. 290, by A. Andréadès (Eng. trans., 1909); see also R. H. I. Palgrave, *Bank Rate and the Money Market*, p. 297.

One result of the division of the accounts of the bank into two departments is that, if through any circumstance the Bank of England be called on for a *larger* sum in notes or specie than the notes held in its banking department (technically spoken of as the "Reserve") amount to, permission has to be obtained from the government to "suspend the Bank Act" in order to allow the demand to be met, whatever the amount of specie in the "issue department" may be. Three times since the passing of the Bank Act—during the crises of 1847, 1857 and 1866—authority has been given for the suspension of that act. On one of these dates only, in 1857, the limits of the act were exceeded; on the other two occasions the fact that the permission had been given stayed the alarm. It should be remembered, whenever the act of 1844 is criticized, that since it came into force there has been no anxiety as to payment in specie of the note circulation; but the division of the specie held into two parts is an arrangement not without disadvantages.

Certainly since the act of 1844 became law, the liability to constant B

fluctuations in the Bank's rate of discount—one main characteristic of the English money market—has greatly increased. To charge the responsibility of the increase in the number of those fluctuations on the Bank Act alone would not be justifiable, but the working of the act appears to have an influence in that direction, as the effect of the act is to cut the specie reserve held by the bank into two parts and to cause the smaller of these parts to receive the whole strain of any demands either for notes or for specie. Meanwhile the demands on the English money market are greater and more continuous than those on any other money market in the world. Of late years the changes in the bank rate have been frequent, and the fluctuations even in ordinary years very severe. From the day when the act came into operation in 1844, to the close of the year 1906, there had been more than 400 changes in the rate. The hopes which Sir Robert Peel expressed in 1844, that after the act came into force commercial crises would cease, have not been realized.

The number of changes in the bank rate from 1876^[3] to 1906 in England, France, Germany, Holland and Belgium were as follows:—

England. France. Germany. Holland. Belgium. 183 27 110 55 77

There has been frequent discussion among bankers and occasionally with the government as to the advantage it might be to grant the Bank of England an automatic power to augment the note issue on securities when necessary, similar to that possessed by the Bank of Germany (Reichsbank). One of the hindrances to the success of such a plan has been that the government, acting on the advice of the treasury, required an extremely high rate of interest, of which it would reap the advantage, to be paid on the advances made under these conditions. Those who made these suggestions did not bear in mind that the mere fact of so high a rate of interest being demanded intensifies the panic, a high rate being associated as a rule with risks in business. The object of the arrangement made between the Reichsbank and the treasury of the empire of Germany is a different one—to provide the banking accommodation required and to prevent panic, hence a rate of only 5% has been generally charged, though in 1899 the rate was 7% for a short time. As is often the case in business, a moderate rate has been accompanied by higher profit. The duty on the extra issue between 1881, when the circulation of the Bank of Germany first exceeded the authorized limit, and the close of the year 1906 amounted to £839,052. Thus a considerable sum was provided for the relief of taxation, while business proceeded on its normal course. The proposal made by Mr Lowe (afterwards Lord Sherbrooke) in 1873 was to charge 12%, a rate which presupposes panic. Hence the negotiations came to nothing. The act of 1844 remains unaltered. The issue on securities allowed by it to the Bank of England was originally £14,000,000. This has since been increased under the provisions of the act to £18,450,000 (29th March 1901). Hence against the notes issued by the bank less gold by £4,450,000 is now held by the bank than would have been the case had the arrangements as to the securities remained as they were in 1844.

The Bank of England has, from the date of its establishment, possessed a practical, though perhaps not an absolutely legal, monopoly of issuing notes in London. It became gradually surrounded by a circle of private banks, some of considerable power.

The state papers included in F. G. Hilton Price's *Handbook of London Bankers* (1876) contain some of the earliest records about the establishment of banking in England. The first of these is a petition, printed in the original Italian, to Queen Elizabeth, of Christopher Hagenbuck and his partners in

Early English banking.

November 1581, representing "that he had found out a method and form in which it will be possible to institute an office into which shall enter every year a very large sum of money without

expense to your Majesty," so "that not only your Majesty will be able to be always provided with whatever notable sum of money your Majesty may wish, but by this means your State and people also; and it shall keep the country in abundance and remove the extreme usuries that devour your Majesty and your people." Hagenbuck proposed to explain his plan on condition that he should receive "6% every year of the whole mass of money" received by the office for twenty years. The queen agreed "to grant to the said Christopher and partners 4% for a term of twenty years, and to confirm the said grant under the great seal." The document is signed by Francis Walsingham, but nothing further appears to have come of it. When we compare the date of this document with that of the establishment of the Banco della Piazza di Rialto at Venice, it is not unlikely that the idea of the establishment of a bank was floating in the minds of people connected with business and had become familiar to Hagenbuck from commerce with Venice. Other state papers in 1621 and 1622 and again in 1662 and 1666 contain somewhat similar proposals which however were never carried into practice.

The little *London Directory*, 1677, contains a list of goldsmiths mentioned as keeping "running cashes." Of these firms described in 1677, five houses were carrying on business in 1876. Three of these, or firms immediately descended from them, Child & Co. of Temple Bar, Martin & Co. of Lombard Street (as Martin's Bank, Ltd.), and Hoare & Co. of Fleet Street, are still carrying on business. Barnetts, Hoare & Co. and Willis, Percival & Co. have been absorbed since 1876, the first by Lloyds Bank (1884), the second by the Capital and Counties (1878). Many of the goldsmiths carried on a considerable business. Thus the books of Edward Blackwell, who was an eminent goldsmith and banker in the reign of Charles II., show that the king himself, the queen mother, Henrietta Maria, James, duke of York, the prince of Orange, Samuel Pepys, the East India Company, the Goldsmiths' Company and other city companies did business with him. Sir John Houblon, the first governor of the Bank of England, kept an account with Blackwell, who was, however, ruined by the closing of the exchequer in 1672. But his son married into the family of Sir Francis Child, and his grandsons became partners in Child's Bank.

[v.03 p.0337]

Besides the banks in London already mentioned, one in the provinces claims to have been established before the Bank of England. Smiths' of Nottingham, since amalgamated with the Union of London Bank, is stated to have been founded in 1688. Others also claim considerable antiquity. The old Bank of Bristol (Bailey, Cave & Co.) was founded in 1750; the business amalgamated with Prescott & Co., Ltd., of London. The Hull Old Bank (Pease & Co.) dated from 1754; this business also still continues (amalgamated, 1894, with the York Union Banking Co., Ltd., and since with Barclay & Co., Ltd.). The banks of Gurney & Co., established at the end of the 18th century in the eastern counties, have with numerous other banks of similar standing amalgamated with the firm of Barclay & Co., Ltd., of Lombard Street.

The business of banking had been carried on by the goldsmiths of the city, who took deposits from the time of James I. onwards, and thus established "deposit-banking" as early as that reign. This is described in a pamphlet published in 1676, entitled *The Mystery of the New-Fashioned Goldsmiths or Bankers Discovered*, quoted by Adam Anderson in his *History of the Great Commercial Interests of the British Empire*, vol. ii. p. 402. During the Civil War "the goldsmiths or new-fashioned bankers began to receive the rents of gentlemen's estates remitted to town, and to allow them and others who put cash into their hands some interest for it, if it remained but for a single month in their hands, or even a lesser time. This was a great allurement for people to put their money into their hands, which would bear interest till the day they wanted it. And they could also draw it out by £100 or £50, &c., at a time, as they wanted it, with infinitely less trouble than if they had lent it out on either real or personal security. The consequence was that it quickly brought a great quantity of cash into their hands; so that the chief or greatest of them were now enabled to supply Cromwell with money in advance on the revenues as his occasion required, upon great advantage to themselves."

The Bank of England, as stated before, was incorporated by the act of 1694. The position of the other banks at that time was defined by that act and the act of 1697, which declared that no bank, that is, no joint-stock bank, was "to be established within England during the continuance of the Bank of England," and also by the act of 1708, which provided that "during the continuance of the Bank of England, no company or partnership exceeding six persons in England" should "borrow, owe or take up any sum or sums of money on their bills or notes payable on demand or at any less time than six months from the borrowing thereof." This was confirmed by the act of 1800. No change of importance was made till the act of 1826, which prohibited "bank notes under £5," and the second Banking Act of that year which allowed the establishment of co-partnerships of more than six persons, which necessarily were joint-stock companies, beyond 65 m. from London. The act of 1833 allowed the establishment of joint-stock banks within the 65 m. limit, and took away various restrictions of the amounts of notes for less than £50. But the power of issuing notes was not allowed to joint-stock banks within the 65 m. radius.

In the early days in England, issuing notes formed, as Bagehot says in his *Lombard Street*, the introduction to the system of deposit-banking—so much so, that a bank which had not the power of issuing notes could scarcely exist out of London.

Bank notes in England originated in goldsmiths' notes. Goldsmiths received deposits of moneys and gave notes or receipts for such moneys payable on demand. The London bankers continued to give their customers notes or deposit-receipts for the sums left by them until about 1781, when in lieu of such notes they gave them books of cheques. Before the invention of cheque-books, the practice of issuing notes was

considered so essentially the main feature of banking, that a prohibition of issue was considered an effectual bar against banking. Accordingly the prohibitory clause in the act of 6 Anne, c. 50, 1707 (in Record edition), which was repeated in the Bank of England Act 1708, 7 Anne, c. 30, § 66 (in Record edition), prohibiting more than six persons from issuing promissory notes, was intended to prevent any bank being formed with more than six partners, and was so understood at the time; and it did have the effect of preventing any joint-stock bank being formed.

The prohibition, as already related, was modified in the year 1826 and removed in 1833. Even then the privilege of limitation of liability was not permitted to any other bank but the Bank of England. The result was that when joint-stock banks were first formed many persons of good means were kept back from becoming shareholders, that is to say partners, in banks. For up to the date of the act of 1862 permitting "limited liability," every shareholder in a joint-stock bank was liable to the extent of the whole of his means (see the article Company). Even as late as 1858 when the Western Bank of Scotland and 1878 when the City of Glasgow Bank failed, very great hardship was inflicted on many persons who had trusted with over confidence to the management of those banks. The failure of the City of Glasgow Bank was the cause of the Companies Act of 1879, passed to enable unlimited companies to adopt limited liability. In limited companies the shareholder who has paid up the nominal amount of his holding is not liable for any further amount, unless the company issues bank notes, in which case the shareholders are liable in the same way as if the company were registered as an unlimited company. The facilities allowed by this act were used by almost every joint-stock bank in the United Kingdom except those banks which were at that date limited by charter or by special act.

To return to the early history of banking—thus, as no bank could be formed with more than six partners during the whole of the period from 1694 to 1826 and 1833, the majority of the banks formed throughout England and Wales for more than a century were necessarily small and usually isolated firms. Further, when a partner died, his capital not infrequently went out of the business; then a fresh partner with sufficient means had to be found, constant change was the result, and confidence, "a plant of

The banks in the country districts had frequently branches in the small market-towns close to them; those in London had never more than one office. These banks were sometimes powerful and generally well managed, a considerable number being established by members of the Society

slow growth," could not thrive, except in those instances when a son or a relation filled the

The restriction of partners in private banks to the number of six continued till 1862. By the act of that year they were allowed to be ten. This power, however, did not extend to issuing private banks, which were restricted to six partners as before. The power of increasing bank partnerships to ten has been made but little use of. The difficulties of carrying on business on a large scale by private firms were augmented by certain legal technicalities which practically rendered large private banks impossible in ordinary circumstances. Hence banking business did not begin to assume its present form till almost half-way through the 19th century. The gradual change followed the passing of the acts of 1826-1833, of 1844-1845, of 1862 and of 1879. Incidentally the act of 1844 had an unexpected influence on the constitution of the banking system. After favouring the existence of small banks for many years, it gradually led, as the time arrived when the establishment of large and powerful banks in England and Wales became necessary, to their formation. No new bank of issue whatever was allowed to be establishedrestrictions were placed on the English issuing banks—private issuing banks with not more than six partners were allowed to remain, to amalgamate with other private issuing banks and to retain their joint issues. The joint-stock banks which possessed issues were also allowed to continue these, but when two joint-stock banks amalgamated, the continuing bank only retained its issue. Also when a private issuing bank was formed into or joined a joint-stock bank, the issue lapsed.

[v.03 p.0338]

vacancy.

of Friends.

The greater number of the provincial banks in England and Wales had been banks of issue up to 1844. The act of 1844 restricted their power of issuing notes, which at that date and even subsequently continued to be of importance to them, in such a manner that, as Sir R. H. Inglis Palgrave stated in giving evidence before the committee of the House of Commons at the banking inquiry of 1875, these banks possessed in their issues a property they could use, but were not able to sell. The statistics forming part of Appendix 14 to the report of the select committee of the House of Commons on banks of issue (1875) give interesting information as to the proportion of notes in circulation to the deposits of banks in various districts of the country and at various dates. The statements were supplied by twenty-one banks, some in agricultural districts, some in places where manufactures flourished, some in mixed districts, commercial and agricultural, or industrial and manufacturing. In all of these, the inquiry being carried as far back as 1844, the proportion of the circulation to the banking deposits had greatly diminished in recent years. In several cases the deposits had increased three-fold in the time. In one case it was five times as large, in another nearly seven times, in another nearly twelve and a half times. The proportion of the circulation to the deposits had very largely diminished in that time. In one instance, from being about one-third of the deposits, at which proportion it had remained for five years consecutively, it fell to 9% at the end of the term. In another from being 22% it had diminished to 1½% of the total. In all cases where the detail was given it had diminished greatly.

The Bank Act of 1844 was arranged with the intention of concentrating the note issues on the Bank of England in order to secure the monopoly of that bank as the one issuer in England and

Wales. The result was that nearly all the provincial banks in England had by 1906 lost the right of issue. Doubtless all were destined to do so before long, a result by which banking in England and the industries of the country must lose the advantage which the local issues have been to Scotland and Ireland. Had the English country banks been allowed, as the Scottish banks were, to associate together and to retain their issues, powerful banks would many years since have been established throughout England and Wales, and the amalgamations of recent years would have been carried through at a much earlier date, and on terms much more favourable to the public.

No security was ever required to be given for the local issues in the United Kingdom. The provisions of the acts of 1844-1845 which compel the Irish and Scottish banks to hold specie against the notes issued beyond the legal limit, do not make the coin held a security for them. The legislation of 1879

Security of note issue.

which made the note issues a first charge, with unlimited liability, on the total assets of the joint-stock banks which accepted the principle of limited liability for the rest of their business, has been the only recognition by the state of the duty to the note-holders of rendering them secure. It has been a real disadvantage to England that this duty has never been sufficiently recognized, and that the provincial note issue, which is a very convenient power for a bank to possess, and incidentally a considerable advantage to its customers, has been swept away without any attempt being made to remedy its deficiencies. There may be objections raised to a note circulation secured by the bonds of the government, but the security of the note issues of the national banks of the United States made against such bonds, has scarcely ever been questioned.

A different policy was followed by Sir Robert Peel in Scotland and in Ireland from that which he established in England. By the acts of 1844-1845 the Scottish and Irish banks were allowed to exceed their authorized issues on holding specie to the amount of the excess, and no restrictions were placed on amalgamations among banks in these countries. In Scotland and in Ireland notes for less than £5 continued to be allowed. The result has been that the ten large banks in Scotland, and six of the nine banks in Ireland, possess the power of issuing notes. The large proportion of local branches in these countries has been greatly assisted by this power.

Originally, besides the Bank of England, nearly all the provincial banks in England and Wales possessed the privilege of issue. These banks continued their operations as previously during the time while the Bank Act was discussed in parliament. When the arrangements which that act created

Amounts in

were made public, nine banks, of which eight were private and one was a joint-stock bank, ceased to issue their notes prior to the 12th of October 1844, when the act came into operation. Of these, the Western District Joint-Stock Banking Co. was dissolved, one of the private banks was closed, the remaining seven issued Bank of England notes and were allowed certain privileges for doing this. By the act of 1844 the maximum circulation of the English issuing banks was fixed at the average circulation of the twelve weeks before the 27th of April 1844.

The number of the banks to which the privilege of circulation was then allowed and the amount of notes permitted were, in England:—

207 private banks with an authorized issue of £5,153,417
72 joint-stock banks with an authorized issue of £8,631,647

The actual circulation of the country in October 1844 was as follows:—

Notes in Circulation.—The monthly return of the circulation ending the 12th of October 1844 (stamps and taxes, 25th October);

| England. | |
|--|-------------|
| Bank of England | £20,228,800 |
| Private banks | 4,674,162 |
| Joint-stock banks | 3,331,516 |
| Scotland. | |
| Chartered, private and joint-stock banks | 2,987,665 |
| Ireland. | |
| Bank of Ireland | 3,597,850 |
| Private and joint-stock banks | 2,456,261 |
| Total | £37,276,254 |

In May 1907 the number and amounts were reduced to:—

| | Authorized Issue. | Actual Issue. |
|----------------------|-------------------|---------------|
| 12 private banks | £482,744 | £122,536 |
| 17 joint-stock banks | 1,084,836 | 437,693 |

The reason why the actual circulation of these banks is so far below the authorized issue is that under existing circumstances their circulation can only extend over a very limited area. The notes

of country banks are now almost unknown except in the immediate neighbourhood of the places where they are issued; though they may all be payable in London, yet there is often considerable difficulty in getting them cashed.

The average circulation in 1906 was as follows:—

| Bank of England | £28,890,000 |
|-------------------------|-------------|
| Private banks | 124,000 |
| Joint-stock banks | 429,000 |
| Total in England | £29,443,000 |
| Scotland | 7,477,000 |
| Ireland | 6,452,000 |
| Total in United Kingdom | £43.372.000 |

This shows an apparent increase of more than £6,000,000 since 1844. The decrease of the country circulation in England and the increase of the Scottish and Irish circulations may be set off against each other. The increase is mainly in the notes of the Bank of England. In 1844 the number of banking offices in England and Wales was 976, while in 1906 there were more than 5880. Each of these offices must hold some till-money, and of this Bank of England notes almost always form a part. Hence it is probable that a large part of the increase in the circulation of the Bank of England since 1844 is held in the tills of the banks in England and Wales, and that the active note circulation of the United Kingdom is but little larger than it was.

It may be added that the government received from the note circulation for a typical year (ending 5th of April 1904), out of the profits of issue (Bank of England) £184,930, 2s. 2d., and also composition for the duties on the bills and notes of the banks of England and Ireland and of country bankers, £120,768, 18s. 6d.

In 1906 the banking business of England was carried on practically by about ten private and sixty joint-stock banks of which more than one was properly a private firm under a joint-stock form of organization. Though the number of individual banks had diminished, the offices had greatly increased.

The records of the numbers of banks in the United Kingdom have up to quite recent years been very imperfect. Such as exist were made by individual observers. The banks of England and Wales are believed to have been 350 in number in 1792. Those registered from 1826 to 1842 were:—

[v.03 p.0339]

| | Private. | Joint-stock |
|------|----------|-------------|
| 1826 | 554 | |
| 1827 | 465 | 6 |
| 1833 | 416 | 35 |
| 1842 | 311 | 118 |

The number of banking offices in England and Wales was estimated by Mr. William Leatham in 1840 as being 697. The *Banking Almanac* for 1845 gives the number in 1844 for England and Wales as 336 private bank offices and 640 joint-stock offices, Scotland 368 offices, Ireland 180 offices.

The number of inhabitants to each office was as follows in 1844 and 1906:—

| | Number of Banking | | Number of Inhabitants to | |
|-------------------|----------------------|-------|-----------------------------|-------|
| | Offices. | | Each C | |
| | 1844. | 1906. | 1844. | 1906. |
| England and Wales | 976 | 5527 | 16,305 | 5885 |
| Isle of Man | | 23 | | 2417 |
| Scotland | 368 | 1180 | 7,120 | 3790 |
| Ireland | 180 | 777 | 45,417 | 5738 |
| In United Kingdom | 1524 | 7507 | 17,526 | 5530 |

In the latter years of the 18th century and the early years of the 19th, the note circulation was a very important part of the business, but about that date the deposits began to be, as they have continued since, far more important. It is unfortunately impossible to give any trustworthy statistics of the position of banking in the United Kingdom extending back for more than forty or fifty years. Even the Scottish banks, who have been less reticent as to their position than the English banks, did not publish their accounts generally till 1865. The figures of the total deposits and cash balances in the Irish joint-stock banks were published collectively from the year 1840 by the care of Dr Neilson Hancock, but it is only of quite recent years that any statement of the general position other than an estimate has been possible owing to the long-continued reluctance of many banks to allow any publication of their balance-sheets. A paper by W. Newmarch, printed in the *Journal of the Statistical Society* for 1851, supplies the earliest basis for a trustworthy estimate. According to this the total amount of deposits, including the Bank of England, in England and Wales, Scotland and Ireland, may have been at that date from £250,000,000 to £360,000,000. The estimate in Palgrave's *Notes on Banking* (1872), excluding deposits in

discount houses and the capitals of banks, was from £430,000,000 to £450,000,000. The corresponding amounts at the close of 1906 were, in round figures, including acceptances &c., £997,000,000. The total resources, including capitals and reserves and note circulation (in round figures £177,500,000), were for 1906:—

> England and Wales— Bank of England and other banks £922,297,000 Scotland 135,042,000 Ireland 73,707,000 898,000 Isle of Man £1,131,944,000

The progressive growth in bank deposits since it has been possible to keep a record of their amounts, affords some means of checking roughly the correctness of the estimates of 1851 and 1872. Broadly speaking, it may be said that the bank deposits of the United Kingdom have about doubled since 1872.

The purely city banks had associated themselves in a "Clearing House" certainly by 1776. An entry in the books of the Grasshopper, [4] namely

eighteen joint-stock banks who joined in the clearing—nineteen banks in all.

-"1773 to quarterly charge for use of the Clearing-room of 19/6d.," points to an earlier and perhaps less definitely organized system of settlement. A house was taken for the purpose in 1810, in which year the number of banking houses who settled their accounts with each other at the "Clearing House" was forty-six (Gilbart's History and Principles of Banking, p. 78). The Bank of England has never been a member of the Clearing House, though it "clears on one side," i.e. its claim on the clearing bankers is made through the Clearing House, but the claims of the clearing bankers on the bank are forwarded direct to Threadneedle Street twice or thrice daily. Nor did the banks in Fleet Street or at Charing Cross belong to it. In 1858 the clearing of country cheques was added through arrangements made by Lord Avebury, then Sir John Lubbock. The "country clearing" is a great assistance to business, as it enables a cheque drawn on the most distant village in England to be dealt with as conveniently as a cheque on London. Of the forty-nine banks in London in 1844, twenty-six were connected with the Clearing House. At that time only private banks were allowed to be members. In 1854 the joint-stock banks made their way into that body, and in 1906 the numbers were one private bank and

Practically at the present time every large transaction in the United Kingdom is settled by cheque, that is, by a series of ledger transfers, notes and specie being but the small change by which the fractional amounts are paid. A large proportion of these transactions are arranged through the operation of the London Clearing House. This is facilitated by the fact that every bank in the United Kingdom has an agent in London.

The annual circulation shown by the London Clearing House is more than £12,000,000,000. No one asks what stock of gold is held by the bank on which the cheques are drawn, or what the bank itself keeps in reserve. The whole is taken in faith on a well-founded trust. It is the most easily worked paper circulation and circulating medium in existence. Like the marvellous tent of the fairy Paribanou, it expands itself to meet every want and contracts again the moment the strain is passed. (See the article by R. H. Inglis Palgrave on "Gold and the Banks," Quarterly Review, January 1906.)

If we add to the returns of the London Clearing House those of the clearing houses in the large towns of England, Ireland and Scotland, and the numerous exchanges which occur daily, and the large number which the different offices of banks with a great many branches settle among themselves, and the number drawn by one customer of a bank and paid to another, we may form some notion of the vast amount of the yearly turnover in cheques. This may be roughly estimated to be at least twice as great as that registered by the London Clearing House. The earliest authentic statement as to the clearing is found in the Appendix to the Second Report, Committee of House of Commons, Banks of Issue (1841).

| In 1839 the | e figure | s of the | Londo | n clearings were | £954,401,600, | 29 banks. |
|-------------|----------|----------|-------|------------------|----------------|-----------|
| In 1840 | 11 | п | п | II | 978,496,800, | 29 " |
| In 1899 | 11 | п | п | П | 9,150,269,000, | 19 " |
| In 1900 | 11 | п | ш | II | 8,960,170,000, | 19 " |
| In 1906 | п | п | п | П | 12 711 334 000 | 18 " |

In 1695, shortly after the establishment of the Bank of England, the Scottish parliament passed an act for the establishment of a public bank. Amongst *Scottish banks.* the first names is that of Thomas Coutts, a name still commemorated in one

of the most substantial banks in London. The terms of the establishment were more favourable than those connected with the establishment of the Bank of England, for they obtained the exclusive privilege of banking for twenty-one years without giving any consideration whatever. It may have been the natural caution of the country, or the fact that William III. was then king, which led to the Bank of Scotland being prohibited under a heavy penalty from lending money under any circumstances to the king. It is the only Scottish bank established by act of parliament. The directors began at a very early period to receive deposits and to allow interest thereon, also to grant cash credit accounts, a minute of the directors respecting the mode of keeping the latter

being dated so far back as 1729.

Though the system of branches forms now so marked a feature of banking in Scotland, a good many years had to pass before they obtained any hold. It was not till about the year 1700 that the directors of the Bank of Scotland established branches at Glasgow, Aberdeen, Dundee and Montrose, but so little encouragement was given to these branches, the expenses far exceeding the profits arising from them, that the directors resolved to close them. In 1731 another attempt was made, and agencies were established at Glasgow, Aberdeen and Dundee. But after a trial of two years they were discontinued. It was not till 1774 that branches were again established by the bank

Soon after the establishment of the Bank of Scotland the directors began to issue notes, or, as they were then called, bills or tickets, for £100, £50, £20, £10, and £5. In 1704 £1 notes were issued for the first time. In 1727 the Royal Bank of Scotland was established by a charter of incorporation,—which granted them "perpetual succession and a common seal." There was a great rivalry between the two companies. The British Linen Company was incorporated in 1746 for the purpose of undertaking the manufacture of linen, but by 1763 they found it best to confine their operations to banking transactions. This bank also was incorporated by charter.

[v.03 p.0340]

The note circulation was always an important item in the Scottish banks. Thus in the case of the Bank of Dundee, the receiving money from the public did not commence till 1792. Up to that time the whole business of the bank from 1764 onwards, twenty-eight years in all, had consisted in its issue of notes, which had varied from about £23,000 to £56,000. The Bank of Dundee was amalgamated with the Royal Bank of Scotland in 1864, when its deposits amounted in round figures to £700,000 and its note circulation to £41,000. After 1792, the money deposited with the banks in Scotland rapidly increased, but the habit of hoarding savings in a chest up to amounts of £10 or £20 continued to a much later period (*History of the Dundee Banking Co.*).

Private banking never appears to have had any considerable hold in Scotland. In 1819 eight private banks were in existence. These had all disappeared by 1844. In 1906 there were only ten banks of issue in Scotland, which practically carried on the whole business of the country. There were two other small banks established comparatively recently. These ten banks had, in 1906, 1180 branches

The history of the growth and expansion of Scottish banking since 1826 is, as far as can be traced, as follows:—

| Date. | Deposits. | | Number of Offices. | | | |
|-------|---|-----------|--------------------|--------|--------------|--|
| 1826 | £21,000,000 | 167 = 1 | to every | 13,170 | inhabitants. | |
| 1841 | 27,000,000 | 380 = 1 | II | 6,600 | II . | |
| 1856 | \{ 63,000,000 \\ and capital \} | 585 = 1 | п | 5,230 | п | |
| 1872 | (92,000,000 including all liabilities and capital | 790 = 1 | 11 | 4,250 | п | |
| 1906 | 135,042,000 including all liabilities and capital | 1,180 = 1 | 11 | 3,790 | п | |

Against every note issued in excess of the limit allowed by the acts of 1844-1845, gold has to be held at the offices of the issuing banks in Scotland and Ireland. The amount of the specie to be thus held was, as explained by Sir Robert Peel in his speech of the 25th of April 1845, to be ascertained by the average amount of the note-issue for four weeks preceding. The object of the holding of this amount of specie by the bank which issued the notes was designed by Sir Robert Peel to cause the circulating medium of the country, being partly of notes and partly of specie, to fluctuate in the same manner as if it had been a metallic circulation only. The specie held in Scotland and Ireland against the note-issue is not a special security for the note circulation, but is placed in the banks there for this purpose. The influence ascribed to the working of the note circulation in the earlier part of the 19th century accounts for this legislation, which, as Sir Robert Peel stated in his speech of the 6th of May 1844, was intended to "ensure the uniform equivalency of bank notes to coin." It is not applicable to the present position of the circulating medium of the United Kingdom, which now consists mainly of a circulation of cheques. This differs absolutely from what was contemplated by Sir Robert Peel; no attempt is or can be made to cause such a paper circulation to fluctuate as if it were one of specie only. One result of the limitation of the power of note-issue to the banks in Scotland which possessed that power in 1845 has been that no important bank has been established in that country since. Notes are so largely employed in ordinary business in Scotland that a bank which does not possess the power, practically cannot carry on business and supply the needs of its customers. This limitation in the number of the banks has, however, not been accompanied by any deficiency in the supply of banking accommodation to the people. There is a larger number of banking offices in proportion to the population in Scotland than in England and Wales or Ireland.

The large number of branches must, however, be a cause of great expense, and in several other respects it is obvious that a business carried on in such thinly peopled districts as are found in

many parts of Scotland, must be conducted at a disadvantage in comparison with those banks which deal with more active centres of commerce. Although the profit derived from their large issue of notes may be thought to be considerable, yet, when we consider the many expenses incurred in conducting a large note circulation, the cost of printing, stamp duty, and the charges on importing gold from London when the circulation exceeds the limit fixed by the act of 1845. no small deductions must be made from the apparent profit to be derived from this head, if there is any direct profit at all.

On the other hand, the great number of branches possessed by the Scottish banks tends beyond doubt to their stability and prosperity. The network of banks on the surface of Scotland is as important to the development of the prosperity of the country as the network of the railways. It has caused a great economy of capital, as the universal practice of people, even of the most moderate means, is to lodge their money with the banks.

The early history of banking in Ireland was marked by legislation even less favourable to the formation of a steady and dependable system than in England, and in 1695 several of the principal merchants in Dublin met

together for the purpose of forming a public bank for Ireland on the model of the Bank of England. For many years this proposal met with no favour. It was not till 1783 that the Bank of Ireland was established and commenced its business. The first governor was David La Touche, junior, and two other members of his family were amongst the first board of directors. The bank met with very great success, but the jealousy against rival establishments was extreme. By the act forming the Bank of Ireland it was enacted that no company or society exceeding six in number, except the Bank of Ireland, should borrow or take up money on their bills or notes payable on demand. In the year 1821 the act was so far modified as to permit the establishment of banking companies exceeding six in number at a distance of 50 m. from Dublin. In 1824, in consequence of the ambiguity of that act, an act had to be passed to explain it. It was not till 1845 that the restriction as to the 50-m. limit was withdrawn.

The establishment of any other bank but the Bank of Ireland was for a long time hindered by the legislation on the subject. Some of the restrictions were so extraordinary that it will be interesting to refer to three of the more important acts.

1741, 15 Geo. II.—Partnerships authorized for the purpose of trade and manufacture; but such partnerships were not to exceed nine in number, nor was the capital stock of such co-partnership to exceed, at any time, the sum of £10,000.

1780-1781, 21 and 22 Geo. III.—"Anonymous Partnership Act,"—limited liability not to exceed £50,000, but "business of banking or discounters of money" expressly excluded.

1759, 33 Geo. II.—By this act a person while he continued a banker could not make a marriage settlement on a son or daughter, a grandson or granddaughter, so as to be good against his creditors, though for a valuable consideration, and though such creditors were not creditors at the time the grant was made. This act gave power to creditors over all conveyances by bankers affecting real estates; and all dispositions after the 10th of May 1760 by bankers of real or leasehold interest therein to or for children were made void as against creditors, though for valuable consideration and though not creditors at the time. No banker to issue notes or receipts bearing interest after the 10th of May 1760. Some of these enactments appear to be in force at the present day; suggestions have been made, though apparently unsuccessfully, for their repeal.

So extraordinary were the views of the common people that a banker in Dublin of the name of Beresford having made himself very unpopular, a "large assemblage of ignorant country people having previously collected a quantity of Beresford's notes, publicly burnt them, crying out with enthusiasm while the promises to pay on demand were consuming, 'What will he do now; his bank will surely break.'"

The number of banks which failed in Ireland in earlier times was extraordinary; thus Sir Robert Peel in his speech of the 9th of June 1845 on the Bank Act of that year, made a quotation "from the report of the committee of Irish exchanges, which sat in 1804. At that period there were fifty registered banks, but they all failed, and their failures, I know personally, led to the most fearful distress." Since the legislation of 1845, however, the business has been carried on with equally extraordinary steadiness and success, and at the present time is on a footing fully equal to that of any other part of the United Kingdom.

[v.03 p.0341]

The earlier history of banking in Ireland pursued very closely the same process of development as in England. Circulation preceded and fed deposits. The credit which the banks obtained by the ready acceptance of their notes brought customers to their counters, and thus the existing system, fortunate in excellent managers, was built up gradually and surely.

Alone in the three kingdoms, Ireland maintains the same limit of authorized circulation as that established by Peel's Act of 1845. Not one of the six banks which had the privilege of issue at that period has lost it since.

The names of the banks carrying on business in Ireland, the years when they were established and their position in 1906, are as follows:—

Capital of Irish Joint-Stock Banks in 1906

Name of Bank and Year Capital Rate of

| when established. | | paid-up. | Dividend |
|----------------------|------|------------|------------|
| | | | per annum. |
| Bank of Ireland | 1783 | £2,769,230 | 11 |
| Hibernian Bank* | 1824 | 500,000 | 10 |
| Provincial Bank | 1825 | 540,000 | 20 |
| Northern Banking Co. | 1825 | 500,000 | 18½ |
| Belfast Banking Co. | 1827 | 500,000 | 36 |
| National Bank | 1835 | 1,500,000 | 8 |
| Ulster Banking Co. | 1836 | 500,000 | 18 |
| Royal Bank* | 1836 | 300,000 | 12 |
| Munster Bank, Ltd.* | 1864 | 200,000 | 8 |

^{*} Thus marked are not banks of issue.

Banking, like every other business, has to pass through periods of difficulty. The severity of these in the case of banking is intensified by the vast number

Banking crises of interests affected. These, on the one hand, are world-wide in their scope,

on the other they touch every home in the country. The stringency of such a time in England has since the passing of the act of 1844 been greatly enhanced by a doubt being sometimes felt as to whether a relaxation of the act of 1844 would be allowed. In any case, some little time must elapse before the assent of the ministers of the crown to the request of the Bank of England can be known. Since 1844 there have been five periods of pressure,—during 1847, 1857, 1866, 1870 and 1890. Of these in three, 1847, 1857 and 1866, the difficulties reached panic.

The crisis of 1847 was brought on by the speculation in railway enterprise which had gone on since 1845. So little had the anxieties of the autumn been anticipated that the bank rate of discount was 3% on the 1st of January. It was raised to 3½% on the 14th and to 4% on the 21st. It became 5% on 8th April, 51/2% on 5th August, 6% on 30th September and 8% on 25th October. This was the highest. It was lowered to 7% on 22nd November, on 2nd December to 6% and on 23rd December to 5%. An announcement was made on the 1st of October that no advances would be made on public securities. This was followed by general anxiety and alarm.

The reserve of the bank was rapidly reduced to a very low ebb.

Bank of England Reserve of Specie.

1847, 16th October £3,070,000 23rd October 1,990,000 30th October 1,600,000

Meanwhile the anxiety and alarm prevailing were causing a general hoarding of coin and bank notes, and it really appeared not unlikely that the banking department of the Bank of England might be compelled to stop payment while there was more than £6,000,000 of specie in the issue department. The chancellor of the exchequer (Sir C. Wood, afterwards Lord Halifax) was urged by many deputations and remonstrances to relax the Bank Act, but he declined. At last, on the 22nd or 23rd of October, some of the leading city bankers had an interview with the prime minister (Lord John, afterwards Earl, Russell), and on their explaining the necessities of the position, the desired relaxation was given. The official letter (25th October) recommended "the directors of the Bank of England, in the present emergency, to enlarge the amount of their discounts and advances upon approved security." A high rate, 8%, was to be charged to keep these operations within reasonable limits; a bill of indemnity was promised if the arrangement led to a breach of the law. The extra profit derived was to be for the benefit of the public. The effect of the government letter in allaying the panic was complete.

The crisis of 1857 was the last occasion of an official inquiry. This is contained in the Report and Evidence of the Select Committee of the House of Commons on the Bank Acts (1857, 1858). The evidence given by Mr Sheffield Neave, the governor, and Mr Bonamy Dobree, deputy-governor of the bank in 1858, gives a vivid picture not only of what occurred, but of what might be expected to recur on such occasions. The wildest alarm prevailed, exchequer bills were scarcely saleable, and the bank itself sold £3,000,000 government securities at a considerable loss.

The extreme pressure was relaxed by the letter issued by the government on the 12th of November 1857, signed by Lord Palmerston, then premier, and Sir G. C. Lewis, which allowed a temporary relaxation of the Bank Act of 1844. The public alarm, however, was so great that it was not until the 21st of November that the severity of the pressure was in any way diminished. On the 20th of November the notes issued to the public on securities beyond the statutory limit (then £14,475,000) reached the sum of £928,000. By the next week the issue was almost down to the limit, and in the week following it was within the limit. On the 1st of January 1858 the bank rate was lowered to 8% and the anxiety gradually passed away. Had the treasury letter been issued earlier, the pressure might not have been so severe, and the governor of the bank expressed a strong opinion that, if it had been later, it would not have been sufficient. November 1857 was the only occasion when the limits of the Bank Act as to issue were actually passed.

During the crisis of May 1866 £4,000,000 left the bank on one day in notes and coin, and the reserve of the bank was reduced in the return of the 1st of June of that year to £415,000. The bank rate was raised to 10% and permission was given by the government to suspend the act. This, however, was not done. Tradition says that the bank asked the bankers, during the period of heaviest pressure of that terrible crisis-pressure more severe than anything that had taken place before or that has occurred since, to pay in every night the notes they had drawn out in the morning which were still in their tills at the close of the day, and that hence the legal limit was never exceeded. But it was not till the 6th of August that the rate was reduced to 8%.

The effect of the crisis of October 1890 was far less severe. This was due to the judgment and skill displayed by the governor (Mr Lidderdale) and the directors of the bank, who imported £3,000,000 in gold from Paris. The reserve in that year never dropped below £10,000,000, and before the end of November the anxiety had greatly passed away. "Caution prevailed, but not panic, and the distinction is a very clear one." (See arts. on "Crises," Dictionary of Political Economy, vol. i.)

The most important requirement of banking in the United Kingdom is still the establishment of an efficient specie reserve. The reserve in the banking department of the Bank of England averaged:

£8,500,000 in 1845. £11,600,000 in 1875. 8,400,000 in 1855. 15,100,000 in 1885. 8,000,000 in 1865. 29,900,000 in 1895. £23,500,000 in 1906.

This provides but a narrow basis for the whole business requirements of the The "Reserve" country. Though much larger than in several previous years, it cannot be question. regarded as adequate. The figures fluctuate more severely than these decennial averages show, and the progress has not been one of uniform increase. Thus the £15,100,000 in 1885 was followed by £12,700,000 in 1888. The £29,900,000 of 1895 was followed by £34,600,000 in 1896 and £21,200,000 in 1899.

Beyond, or side by side with, the reserve of the Bank of England there are the reserves held by the other banks. Part of these are held in the form of balances at the Bank of England, part in specie and bank notes in their own tills. The latter, hence, are not unlikely to be estimated twice over. The published figures on this point are meagre.

[v.03 p.0342]

The expectations expressed by Sir Robert Peel in his speech on the bank charter and the currency of the 6th of May 1844 have not yet been fulfilled. "I rejoice," he said, "on public grounds, in the hope that the wisdom of parliament will at length devise measures which shall inspire just confidence in the medium of exchange, shall put a check on improvident speculations, and shall ensure the just reward of industry and the legitimate profit of commercial enterprise conducted with integrity and controlled by provident calculation."

The extreme measures which have been required since the act af 1844 point out for themselves the necessity for reform. Three times since the date of the Bank Act of 1844 it has been needful to give permission for the suspension of that act which forms the very foundation of the monetary system of Great Britain. This, whenever it has occurred, has exercised a very injurious effect on credit abroad, as well as on prosperity at home.

The British money-market, the clearing-house of the world, is, in consequence of the smallness of its reserve, exposed to greater fluctuations than that of any other country. These fluctuations may arise from the need of meeting the requirements of other countries for specie or those arising from domestic trade. The recorded excess of imports over exports, £147,000,000 in 1906, though the difference is eventually balanced by the "invisible" exports, gives foreign nations at times a power over the British money-market greater than has ever previously been the case. The current must always have a tendency to flow outwards; this is enhanced by the great increase in the number of foreign banks which have branches in England. The need of providing sufficient reserves to meet requirements thus occasioned is obvious.

As regards the banks in which British interests are concerned in British colonies and other countries we can only speak briefly. It must not be overlooked that in the Dominion of Canada there are 29 banks, many of them large, managed much on the Scottish principle with capitals of nearly

£19,000,000 and deposits of about £140,000,000. These banks have more than 1200 offices. In Australia and New Zealand there are 24 banks with capitals of nearly £18,000,000 and deposits of about £130,000,000. The number of offices is nearly 1700. There are, including the three Presidency banks, about 15 banks doing business mainly in India—in some cases connecting neighbouring countries and places like Bangkok, Hong-Kong and Zanzibar. These banks have capitals of more than £5,000,000 and deposits of fully £36,000,000 and over 210 offices. There are at least 8 banks in South and West Africa with capitals of nearly £5,000,000, deposits of nearly £50,000,000 and nearly 370 offices. There are 5 banks, including the Colonial Bank, in other British territories with capitals of about £1,000,000 and deposits of £3,300,000, and about 25 offices. There are thus, besides many private firms doing very considerable business, more than 80 joint-stock British banks working in the colonies with capitals amounting to £48,000,000, deposits £360,000,000 and offices 3505. Outside British territories there are 6 banks, principally in South America, with nearly £4,000,000 capital, £36,000,000 deposits and about 60 offices. There are 6 large banks doing business principally in the East with more than £6,700,000 capitals, £77,000,000 deposits and 106 offices: and 7 other banks, including Barings, with about £4,500,000 capitals and £22,000,000 deposits There are thus about 20 British banks doing business in foreign countries with capitals amounting to £15,200,000, deposits £135,000,000 and

In this statement we have included only the more important banks, which collectively wield about £63,000,000 capital and more than £495,000,000 deposits—in all about £560,000,000 of resources operating at about 3700 offices situated in places as different from each other and as widely separated as California and Hong-Kong, Constantinople and New Zealand.

France.—In France the first bank of issue, originally called the Banque Générale, was established in 1716 by John Law, the author of the Mississippi Scheme and the Système. Law's bank, which had been converted into the Banque Royale in 1718, and its notes guaranteed by the king (Louis XV.), came to an end in 1721; an attempt at reconstruction was made in 1767, but the bank thus established was suppressed in 1793. Other banks, some issuing notes, then carried on operations with limited success, but these never attained any real power. There were many negotiations on the subject of the establishment of a bank in 1796. The financial difficulties of the times prevented any immediate result, but the advice of those engaged in this plan was of great assistance to Napoleon I., who, aided by his minister Mollien, founded in 1800 the Bank of France, which has remained from that time to the present by far the most powerful financial institution in the country. The objects for which it was established were to support the trade and industry of France and to supply the use of loanable capital at a moderate charge. These functions it has exercised ever since with great vigour and great judgment, extending itself through its branches and towns attached to branches over the whole country. At its establishment and for some time subsequently the operations of the bank did not extend over the whole of France. Departmental banks with the privilege of issue had been formed under a law adopted in 1803. At the close of 1847 there were nine of these banks existing in as many of the larger towns. In 1848, however, they were absorbed into the Bank of France, which has since possessed an exclusive privilege of issue, and in 1863 took over the Bank of Savoy after that province was united to France.

The Bank of France has successfully surmounted many political as well as financial troubles both during and since the times of Napoleon I. The overthrow of the government of Louis Philippe in 1848, the war with Germany in 1870, the many difficulties that followed when the Commune reigned in Paris in 1871, the payment of the war indemnity—not completed till 1873—were all happily overcome. Great pains, too, have been taken, especially of recent years, to render services to large and small businesses and to agricultural industry. In 1877 the offices of the Bank of France were 78 in number; in 1906 they were 447, including the towns "connected with the branches"—an arrangement which, without putting the bank to the expense of opening a branch, gives the place connected many of the advantages which a branch confers. The quantity of commercial paper discounted is very large. More than 20,000,000 bills were discounted in 1906, the total amount being £559,234,996. The advances on securities were in the same year £106,280,124. The rate of discount in Paris is as a rule lower and the number of alterations fewer than in London. From May 1900 to January 1906 there was no change, the rate remaining uniformly at 3%. Bills as low as 4s. 2d. are admitted to discount, including those below 8s.; about 232,000 of this class were discounted in 1906. Since the 27th of March 1890 loans of as small an amount as £10 are granted. In most cases three "names" must be furnished for each bill, or suitable guarantees or security given, but these necessary safeguards have not to be furnished in such a manner as to hamper applicants for loans unduly. In this manner the Bank of France is of great service to the industry of the country. It has never succeeded, however, in attracting deposits on anything like the scale of the Bank of England or the banks of the English-speaking peoples, but it held, as stated in the balance-sheet for the 23rd of December 1906, about £35,000,000 in deposits, of which £14,000,000 was on account of the treasury and £21,000,000 for individuals, and the amount held in this manner gradually increases. The report for 1904 says "each year the movement in these increases, and this economical and safe mode of effecting receipts and payments is more and more appreciated by the public." In one respect the Bank of France stands at a great advantage in connexion with this branch of its business. The average amount held in this manner for individuals during 1906 was about £23,000,000. As the accounts numbered 77,159 the average for each account was comparatively small. Accounts so subdivided give a great probability of permanence. The figures of the accounts for 1904 were as follows:—

11,178 current accounts, with power of discount.

4,576 simple current accounts.

26,709 current accounts, with advances.

24,106 accounts, deposits.

Total 66,569 accounts, against 59,182 at the end of 1903.

At the present time the Bank of France operates chiefly through its enormous note circulation (averaging in 1906 £186,300,000), by means of which most business transactions in France are carried on.

The limits of the circulation of the Bank of France and the dates when it has been extended are as follows:—

| Dates | Millions of Francs | Converting the Franc as $25 = £1$. |
|--------------------------|-----------------------|-------------------------------------|
| 15th March 1848 | 350 | £14,000,000 |
| 27th April, 2nd May 1848 | 452 | 18,000,000 |

| 2nd December 1849 | 525 | 21,000,000 |
|--------------------|------|-------------|
| 12th August 1870 | 1800 | 32,000,000 |
| 14th August 1870 | 2400 | 96,000,000 |
| 29th December 1871 | 2800 | 112,000,000 |
| 15th July 1872 | 3200 | 128,000,000 |
| 30th January 1884 | 3500 | 140,000,000 |
| 25th January 1893 | 4000 | 160,000,000 |
| 17th December 1897 | 5000 | 200,000,000 |
| In 1906 | 5800 | 232,000,000 |

[v.03 p.0343] Most business transactions in France are liquidated, not in cheques as in England, but in notes of the Bank of France. These, owing to their convenience, are preferred to specie. This is accumulated in the vaults of the Bank of France, which in 1906 held on average £115,000,000 gold and £42,000,000 silver. The gold held by the Bank of France is generally considerably larger in amount than that held by the Bank of England, which in the autumn of 1890 had to borrow £3,000,000 in gold from the Bank of France at the time of the Baring crisis. The large specie reserve of the bank has given stability to the trade of France, and has enabled the bank to manage its business without the numerous fluctuations in the rate of discount which are constantly occurring in England. It is true that the holding this very large amount of specie imposes a very heavy burden on the shoulders of the shareholders of the bank, but they do not complain. The advantage to business from the low rate of interest which has to be paid for the use of borrowed capital in France is a great advantage to the trade and industry of that country.

> The mass of the reserve in France is so great that the movements of the precious metals, when they are the result only of natural causes, are allowed to go on without corresponding movements in the discount rate. But it must be remembered that this large reserve is held in part against a gigantic note issue, and also that the trade activity and enterprise of the French people are less intense than in either the United Kingdom or Germany; thus it is much easier for the Bank of France to maintain a steady rate of discount.

> Besides the Bank of France, several great credit institutions carry on business in the country; as the Banque de Paris et des Pays-Bas (capital and reserve, £3,729,000; other liabilities, deposits, &c., £14,842,000), the Banque Française pour le Commerce et l'Industrie (£2,450,000; and £3,505,000), the Crédit Lyonnais (£14,000,000; and £82,570,000), the Comptoir National d'Escompte de Paris (£6,772,000; and £47,593,000), the Société Générale pour favoriser le développement du Commerce et de l'Industrie en France (£7,469,000; and £45,800,000), and the Société Générale de Crédit Industriel et Commercial (£1,600,000; and £10,060,000).

> There is also the Crédit Foncier de France with a very considerable capital, but the business done is so largely that of mortgages that it can hardly be included among banks, though it carries on in some measure the business of banking.

> Besides the six important joint-stock banks mentioned above, there exists in France a large number of banks, principally in the provinces, carrying on a very considerable business. Little is known as to their deposits, but their business appears to be conducted with great prudence and discretion. One hundred and eighty-two of these firms were members of the French Country Bankers' Association in 1898. They carry on business in 66 out of the 86 departments into which France is divided. More than one of these banks has several offices—one possessing 18, including the head office. These branches are situated in the small towns in the vicinity. In this the business follows more the English method of small branches. The French Country Bankers' Association holds its meetings in Paris, where matters of interest to bankers are discussed. (See Bankers' Magazine, July 1898.)

> Germany.—Besides the Imperial Bank of Germany, the "Reichsbank," there are about 140 banks doing business in the states which form the German empire. These credit and industrial banks with their large resources have had an immense influence in bringing about the astonishing industrial development of their country. Five banks possess the right of uncovered note-issue; these are:-

| The Imperial Bank of Germany with right of issue £23,641,45 | | | | | | |
|---|---|----|----|-------------|--|--|
| The Bank of Saxony | п | п | 11 | 838,500 | | |
| The Bank of Bavaria | п | | 11 | 1,600,000 | | |
| The Bank of Württemberg | п | | 11 | 500,000 | | |
| The Bank of Baden | п | II | 11 | 500,000 | | |
| | | | - | £27.079.950 | | |

At the Bank of Germany the coin and bullion held is sometimes larger than at the Bank of England. The statement of the specie in the weekly accounts includes silver. The amounts held in gold and silver are only separated once a year, when the balance-sheet is published. The figures of the balance-sheet for the 31st of December 1906 showed in round numbers £24,000,000 gold and £9,000,000 silver. As far as the capital is concerned the £18,000,000 of the Bank of England considerably exceeds the £9,000,000 of the Bank of France and the £12,200,000 of the Bank of Germany. The note circulation of both the other banks is considerably larger than that of the Bank of England, that of the Bank of France being £186,300,000, and of the Imperial Bank of Germany £69,000,000 in 1906.

The capitals and reserves of the German banks, including those of banks established to do business in other countries, as South America and the Far East, and of the Bank of Germany, are about £133,000,000, with further resources, including deposits, notes and mortgage bonds, amounting to fully £414,000,000. The amount of the capital compares very closely with that of the capitals of the banks of the United Kingdom. The deposits are increasing. The deposits, however, are not the whole of the resources of the German banks. The banks make use, besides, of their acceptances in a manner which is not practised by the banks of other countries, and the average note circulation of the Reichsbank, included in the statement given above, is between £60,000,000 and £70,000,000.

A large and apparently increasing proportion of the resources of the German banks is employed in industrial concerns, some of which are beyond the boundaries of the empire. The dangers of this practice have called forth many criticisms in Germany, among which may be quoted the remarks of Caesar Strauss and of Dr R. Koch, the president of the Reichsbank. Dr Koch especially points out the need of the development of powerful banks in Germany unconnected with speculative business of this kind. The object of employing their funds thus is the higher rate of interest to be obtained from these investments than from discounting bills or making loans at home. But such an employment of the resources of a bank is opposed to all regular rules of business and of banking tradition, which abstains from making fixed investments of any large part of the resources of a bank. On the other hand, Dr Koch observes that the risks of the one "reserve system" mentioned by Bagehot are not to be feared in Germany. The recent movement in favour of concentration among the banks has been described by Dr E. Depitre and Dr Riesser, who give particulars of the business done by these banks, which does not correspond with banking as practised in the United Kingdom, being more of an industrial character.

There are also many private banking firms in Germany which do a considerable amount of business.

The Reichsbank, by far the most powerful banking institution in Germany, is managed by the bank directory appointed by the chancellor of the empire. The shareholders join in the management through a committee, of which each member must be qualified by holding not less than three shares. The government exercises complete powers of control through the chancellor of the empire. The influence of the Imperial Bank now permeates, by means of its branches, all the separate kingdoms of the empire—the uniformity of coinage introduced through the laws of 1871-1873 rendering this possible. The Imperial Bank assists business principally in two ways—first, through the clearing system (*Giro-Verkehr*), which it has greatly developed, and secondly, through the facilities given to business by its note circulation. The Imperial Bank also receives deposits, and cheques are drawn against these, but in Germany notes are principally used in payments for ordinary business.

Before the Reichsbank was established, Hamburg was the first, and for a long time the only, example of a clearing in Germany. This was taken up by the Reichsbank when it established its office in Hamburg in the time-honoured building which had belonged to the Hamburg Clearing House. Similar business had long been undertaken by the Bank of Prussia. This was absorbed and developed by the Reichsbank in 1876. Through the "clearing system" money can be remitted from any of the 443 places in which there is an office of the Reichsbank, to any of these places, without charge either to the sender or the receiver. It is sufficient that the person to whom the money is to be remitted should have an account at the bank. Any person owing him money in the remotest parts of the empire may go to the office of the bank which is most convenient to him and pay in the amount of his debt, which is credited on the following day at the office of the bank, without charge, to the account of his creditor wherever he may reside. The person who makes the payment need not have any account with the bank. The impetus given to business by this arrangement has been very considerable. It practically amounts to a money-order system without charge or risk of loss in transmission. From Hamburg and Bremen to the frontiers of Russia, from the shores of the Baltic to the frontiers of Switzerland, the whole of the empire of Germany has thus become for monetary purposes one country only. The amount of these transfers for the year 1906 exceeded £1,860,000,000.

£12,500,000, increased to £14,811,450 by the lapse of the issues of other banks allowed to it, has been extended by these and by the act of the 5th of June 1902 to £23,641,450. Against the notes thus issued which are not represented by specie, treasury notes (*Reichskassenscheine*, the legal tender notes of the empire)^[6] and notes of the issuing banks which are allowed to be reckoned as specie or discounted bills, must be held—maturing not later than three months after being taken—with, as a rule, three, but never less than two, good indorsements. There is also a provision that at least one-third of the notes in circulation must be covered by current German notes, money, notes of the imperial treasury, and gold in bullion or foreign coin reckoned at £69, 12s. per pound fine. The Reichsbank is bound by law to redeem its notes in current German money. It is stated that this may be gold coin or silver thalers, or bar-gold at the rate of 1392 marks (£69, 12s. reckoning marks as 20 = £1) the pound fine of gold. In practice, however, facilities have not

always been given by the Reichsbank for the payment of its obligations in gold, though the importance of this is admitted. In the balance-sheet for 1906 the bills held amounted to £67,000,000, and the loans and advances to £14,200,000. The notes issued averaged for the year

The note circulation is also a powerful factor of the business of the Reichsbank. It is governed by the law of 1875 and the amending law of 1899, corresponding in some degree to Peel's act of 1844, which regulates the note circulation of the Bank of England. An uncovered limit, originally

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£69,000,000. The gold held amounted, 30th December 1906, to £24,069,000. If the condition of business requires that the notes in circulation should exceed the limits allowed by the law, the bank is permitted to do this on the payment of 5% on the surplus. In this respect the German act differs from the English act, which allows no such automatic statutory power of overpassing the limit of issue. Some good authorities consider that this arrangement is an advantage for the German bank, and the fact that it has been made use of annually since 1895 appears to show that it is needed by the business requirements of the country. Of late years the excess of issue of the Reichsbank has been annual and large, having been £25,267,000 on the 29th of September 1906 and £28,632,000 on the 31st of December of the same year. The amount of the duty paid on the excess issue in the year 1906 was £184,764, and the total amount paid thus from 1876 to 1906 was £839,052. The increase of the uncovered limit (untaxed limit of issue called in Germany the "note reserve") has not been sufficient to obviate the need for an excess of issue beyond the limit.

In accordance with a law passed in 1906 the Imperial Bank issues notes (*Reichsbanknoten*) of the value of 20 marks (£1), and 50 marks (£2, 10s.) in addition to the 5, 10, 100 and 1000 mark notes (5s., 10s., £5, £50) previously in circulation. Imperial paper currency of the value of 20 or 50 marks (£1 and £2, 10s.) had previously existed only in the form of treasury notes (*Reichskassenscheine*); these will in consequence be withdrawn from circulation.

The amendment of the banking law of Germany, passed in 1899, not only affects the position of the Reichsbank, but that of the four other note-issuing banks. The capital of the Reichsbank has been raised by the bill of that year to £9,000,000. The reserve fund has been raised out of surplus profits to £3,240,000. This exceeds the amount required by the act of 1899, which was £3,000,000. The amending act further diminishes the dividend receivable by the stockholders of the Reichsbank and increases the share which the government will obtain.

The arrangement with the four note-issuing banks is designed to cause them to work in harmony with the Reichsbank when the Reichsbank has to raise its bank-rate in order to protect its gold reserves. The official published rate of discount of the Reichsbank is to be binding on the private note-issuing banks after it has reached or when it reaches 4%. At other times they are not to discount at more than ¼% below the official rate of the Reichsbank, or in case the Reichsbank itself discounts at a lower rate than the official rate, at more than ½% below that rate. If the Reichsbank discounts below the official rate, it is to announce that fact in the *Gazette*.

The subject being important, we quote from the amending act the sections governing the discount rate:—Gesetz, betreffend die Abänderung des Bankgesetzes vom 14. März 1875; vom 7. Juni 1899, Artikel 7, S. 1. The private note-issuing banks are bound by Artikel 7, S. 2, after the 1st of January 1901:—"(1) Not to discount below the rate published in S. 15 of the bank law, so long as this rate attains or exceeds 4%, and (2) moreover, not to discount at more than ¼% below the Reichsbank rate, published in S. 15 of the bank law, or in case the Reichsbank itself discounts at a lower rate, not to discount at more than ½% below that rate."

It remains to be seen whether the note-issuing banks will find these conditions too onerous, and rather than be bound by them will give up their right of issuing notes. The object of the enactment is apparently to protect the specie reserve of the Reichsbank, but it may be doubted whether, considering the importance of the other banks of Germany—none of which is bound by similar conditions—relatively to the note-issuing banks, the restrictions put on the note-issuing banks will have any practical effect.

Since 1870 banking has made immense progress in Germany, but it may be some time before the habit of making payments by cheque instead of specie or notes becomes general.

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(R. H. I. P.)

UNITED STATES

The early history of the American colonies is strewn, like that of most new countries, with many crude experiments in banking and currency issues. Most of these colonial enterprises, however, were projects for the issue of paper money rather than the creation of commercial banks. Speculative banking was checked to a large extent in the colonies by the Bubble Act (6 Geo. I. c. 18), which was passed in England after the bursting of the South Sea Bubble. This act, which forbade the formation of banking companies without a special charter, was in 1740 extended to the colonies.

The serious history of banking in the United States may be said to have begun with the foundation of the Bank of Pennsylvania. This bank originated in the project of a number of the citizens of Philadelphia to supply the continental army with rations. The first bills, issued in 1780, were nothing more than interest-bearing notes payable at a future time. The advances in continental money made by the shareholders were secured by bills of exchange for £150,000, drawn on the American envoys in Europe, but not intended to be negotiated.

A further outgrowth of the needs of the continental government was the Bank of North America, which was authorized by congress on May 26, 1781. The act gave to Robert Morris, the financier, power to create a bank with a capital of \$400,000, to be increased if desirable. Morris arranged with the Bank of Pennsylvania to take over its holdings of foreign bills and paid in cash its claims against the Federation. The Bank of North America did not begin business until the 7th of January 1782, and there was so much doubt of the power of the continental congress to charter a bank that it was thought advisable to obtain a charter from the state of Pennsylvania. Under this charter the bank continued to operate until it was absorbed in the national banking system in 1863, and it may be considered the oldest organized banking institution in the United States.

The bank did much, during the first eight years after its organization, to restore order to the chaos of Federation finances. It loaned to Morris, as government superintendent of finance, \$1,249,975, of which \$996,581 was repaid in cash and the remainder by surrendering the stock in the bank owned by the government.

The Bank of the United States.—A national bank of issue was one of the essential parts of the system built up by Alexander Hamilton in organizing the finances of the Federal government under the constitution of 1789. The first "Bank of the United States" was accordingly incorporated in 1791, with a capital of \$10,000,000, divided into 25,000 shares of \$400 each. This bank issued circulating notes, discounted commercial paper and aided the government in its financial operations. The government subscribed one-fifth of the capital, but paid for it by a roundabout process which actually resulted in the loan of the amount by the bank to the treasury. Other loans were made by the bank to the government, which gradually carried the obligation by the end of 1795 to \$6,200,000. In order to meet these obligations, the government gradually disposed of its bank stock, until by 1802 its entire holdings had been disposed of at a profit of \$671,860. The bank did not publish regular reports, but a statement submitted by Gallatin to congress for January 24, 1811, showed resources of \$24,183,046, of which \$14,578,294 was in loans and discounts, \$2,750,000 in United States stock and \$5,009,567 in specie.

The expiration of the charter of the bank in 1811 was the occasion of a party contest, which prevented renewal and added greatly to the financial difficulties of the government in the war with Great Britain which began in the next year. Although foreign shareholders were not permitted to vote by proxy, and the twenty-five directors were required to be citizens of the United States, the bank was attacked on the ground of foreign ownership as well as on the constitutional ground that congress had no power to create such an institution.

The government was compelled in the war of 1812 to rely on the state banks. Their suspension of specie payments, in 1814, made it very difficult for the treasury to transfer funds from one part of the Union to the other, because the notes of one section did not circulate readily in another. Gallatin left on record the opinion that the suspension of specie payments "might have been prevented at the time when it took place, had the former Bank of the United States been still in existence."

The financial condition of the government became so bad during the war that the second Bank of the United States was authorized in April 1816. The general project was that of Alexander J. Dallas, who in October 1814 had become secretary of the treasury. The capital of the new bank was \$35,000,000, and the government again appeared as owner of one-fifth of the stock, which was paid in a stock note. The president of the United States was authorized to appoint five of the twenty-five directors and public funds were to be deposited in the bank, "unless the secretary of

the treasury shall at any time otherwise order and direct." The right of congress to charter the bank came before the Supreme Court in 1819 in the famous case of *McCulloch* v. *Maryland*. Chief Justice Marshall rendered the decision that the right to create the bank was within the implied powers granted by the Federal constitution, and that it was not competent for the states to levy taxes upon the circulating notes of the bank or upon its property except in common with other property.

The second Bank of the United States was not well managed in the early part of its career, but was upon a firmer foundation under the presidency of Langdon Cheves in 1819. Its policy greatly benefited commerce, but invited bitter complaints from the private dealers in exchange, who had been enabled to make excessive profits while the currency was below par, because of its different values in different states and the constant fluctuations in these values. The Bank, in the language of the report of Senator Samuel Smith of Maryland in 1832, furnished "a currency as safe as silver, more convenient, and more valuable than silver, which through the whole western and southern and interior parts of the Union, is eagerly sought in exchange for silver; which, in those sections, often bears a premium paid in silver; which is, throughout the Union, equal to silver, in payment to the government, and payments to individuals in business."

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The bank in 1835 had attained a circulation of \$23,075,422; loans of \$59,232,445; and deposits of \$5,061,456. The institution was ultimately destroyed by the open enmity of President Jackson, who in 1833 had suspended the deposit of public money in its custody. This policy known as the "removal of the deposits," excited a bitter political controversy in which Clay and Webster led the opposition, but Jackson was supported by the public (see Jackson, Andrew). The Federal charter of the bank expired in 1836. Under a charter obtained by President Nicholas Biddle from the state of Pennsylvania, the bank continued its business, but without success, and in 1841 it went into liquidation.

The State Banks.—The Bank of the United States found powerful rivals during its life and successors after its death in the banks chartered by the separate states. In the undeveloped state of the country in the early days there was much unsound and speculative banking. The most successful systems were those of New York and New England, where the surplus capital of the country in the early days was chiefly concentrated. The least successful banking systems were those in the newer and poorer sections of the country, and they grew progressively worse as poverty and inexperience added to the difficulty of setting aside capital for investment in the tools of exchange.

The termination of the first charter of the Bank of the United States was followed by a banking mania. In Pennsylvania a bill authorizing 41 new banks was passed over the veto of the governor, and 37 of them were in operation in 1814. Similar movements in other states increased the number of banks in four years (1811-1815) from 88 to 208. The amount of specie was not adequate to support the mass of credit which these banks created, and what there was in the country drifted to New England, which was upon a metallic basis. A number of banks collapsed in 1814, and business prostration was prolonged for several years.

The banking laws of the states varied considerably. Some states authorized the issue of notes upon state bonds, many of which, especially at the outbreak of the Civil War, proved valueless. In New England, however, a system prevailed which required the prompt redemption of the banks' notes at par. The New England Bank was the pioneer of this movement in 1814. In 1824 what was known as the "Suffolk system" of redemption came into operation. This system provided for the deposit by a bank in the Suffolk Bank in Boston of a redemption fund, from which the notes were redeemed and afterwards sent home by the Suffolk Bank for collection. This system, with slight modifications, continued in successful operation until 1858. The circulation of the New England banks in 1858 was less than \$40,000,000 and the redemptions in the course of the year through the Suffolk Bank were \$400,000,000. It was the essential merit claimed for the system that it tended to keep the volume of the circulation constantly adjusted to the requirements of business. A branch redemption agency was established at Providence. Legal sanction was given to the system in Vermont by an act of 1842, which levied a tax of 1% upon bank capital, but remitted this tax to any bank which should "keep a sufficient deposit of funds in the city of Boston, and should at that city uniformly cause its bills to be redeemed at par."

The period from 1836 to 1842 was a trying one for American banking. It was preceded by another great expansion in financial ventures, made without sufficient circulating capital or adherence to conservative banking methods. Foreign capital had come into the country in considerable amounts after the English crisis of 1825, the entire debt of the general government was paid off and a tremendous speculation occurred in public lands, which were expected to advance rapidly in value as the result of immigration and the growth of the country. The sales of public lands in 1836, on the eve of the crisis, reached 20,074,870 acres and brought receipts to the treasury of \$25,167,833. How essentially speculative was the mass of these sales is indicated by the fact that such receipts declined in 1842 to only \$1,417,972. President Jackson pricked the bubble of speculation by the "Specie circular" of July 11, 1836, requiring payments for public lands to be made only in specie or notes of specie value. Practically every bank in the Union stopped payment, and banking capital fell from \$358,442,692 in 1840 to \$196,894,309 in 1846. As usual in periods of business collapse the shrinkage of capital did not follow at once the outbreak of the panic, but was the result of gradual liquidation. Specie payments were resumed in 1838, but there was another crash in 1842, after the United States Bank finally suspended.

In New York, which was becoming the chief commercial state of the Union, the banks of New

York City were generally sound, but several different systems were tried of securing the circulating notes. The "safety-fund system," inaugurated in 1829, provided for a contribution by each bank towards a fund to meet the deficit of any contributing bank which might fail with assets insufficient to meet its liabilities. It was the intention of the act to protect by this fund only the bank-notes, but it was treated as a fund for the payment of all the liabilities of a failed bank and in consequence the fund was exhausted by important failures which occurred in the panics of 1837 and 1857. Before 1843 the issue of notes was not controlled by the state, so that in several cases there were illegal over-issues.

What was called the "free-banking system" was inaugurated in New York by the act of 1838. This system permitted any body of persons, complying with the requirements of the law, to form a bank and issue circulation secured by the deposit of various classes of public bonds. This system was in operation at the outbreak of the Civil War, was imitated in several other states, and became in a measure the model of the national banking system. The state banks of Indiana and Ohio were among the most successful of the state banks, being modelled somewhat on the European plan of a central bank. They held in their states an exclusive charter for issuing notes and had branches at important points throughout the state. Under the management of Hugh McCulloch, afterwards secretary of the treasury, the bank of Indiana weathered the crisis of 1857 without suspending specie payments, and retired its circulation when gold went to a premium in 1862.

One of the defects of the state system of note-issues was the inconvenience which it occasioned. Notes issued outside a state could not safely be received without careful scrutiny as to the responsibility of their issuers. The systems prevailing in New England, in Louisiana, in Ohio and in Indiana were eminently successful, and proved the soundness of the issue of bank-notes upon the assets of a well-conducted commercial bank. But the speculation fostered by loose banking laws in some other states, and the need for uniformity, cast a certain degree of discredit upon the state banks, and prepared the way for the acceptance of a uniform banking system in 1864.

The power of note-issue formed a more important part of banking resources before the Civil War than in later years, because the deposit system had not attained its full development. Thus in 1835 circulation and capital of state banks combined were about \$335,000,000 and deposits were only \$83,000,000, in 1907 circulation and capital of national banks \$1,430,000,000, while deposits were \$4,322,000,000—in the earlier period deposits forming less than one-third of the other two items and in the later period three times the other items. The circulation of the state banks fluctuated widely at different periods. A maximum of \$149,185,890 was attained in 1837, to decline to \$106,968,572 three years later and to a minimum of \$58,563,608 in 1843. From this point there was a tendency upward, with some variations, which put the circulation in 1845 at \$89,608,711; 1848, \$128,506,091; 1850, \$131,366,526; 1854, \$204,689,207; 1856, \$195,747,950; 1858, \$155,208,344; 1860, \$207,102,477; 1863, \$238,677,218.

Other leading items of the accounts of the state banks for representative years are as follows:—

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State Banking Progress, 1835-1863.

| Year. | No. of Banks. | Capital Stock. | Loans and Discounts. | Deposits. |
|-------|------------------|----------------|----------------------|--------------|
| 1835 | 704 | \$231,250,337 | \$365,163,834 | \$83,081,365 |
| 1845 | 707 | 206,045,969 | 288,617,131 | 88,020,646 |
| 1850 | 824 | 217,317,211 | 364,204,078 | 109,586,595 |
| 1855 | 1307 | 332,177,288 | 576,144,758 | 190,400,342 |
| 1860 | 1562 | 421,880,095 | 691,945,580 | 253,802,129 |
| 1863 | 1466 | 405,045,829 | 648,601,863 | 393,686,226 |

The National Banking System.—The creation of the national banking system was mainly the outcome of the financial necessities of the Federal government in the Civil War. It was found difficult to float government bonds at profitable rates, and Mr Chase, the secretary of the treasury, devised the scheme of creating a compulsory market for the bonds by offering special privileges to banks organized under Federal charters, which would issue circulating notes only when secured by the deposit of government bonds. But this plan, authorized by the act of 25th February 1863 (supplemented by the act of 3rd June 1864), was not sufficient to give predominance to the national banks. The state banking systems in the older states were so firmly entrenched in the confidence of the commercial community that it became necessary to provide for imposing a tax of 10% upon the face-value of the notes of state banks in circulation after the 1st of July 1866. The state banks were thus driven out of the note-issuing business, some being converted into national banks, while others continued their commercial business under state laws without the privilege of note-issue. A remarkable growth in the national banking system took place; in 1864 there were 453 national banks with an aggregate capital of \$79,366,950, and in 1865 there were 1014 banks with an aggregate capital of \$242,542,982.

The national banking system was specially marked by the issue of circulating notes upon United States bonds. Any national bank desiring to issue notes might by law deposit with the United States treasurer bonds of the United States to an amount not exceeding its capital stock, and upon such bonds it might receive circulation equal to 90% of their par-value. No bank could be established which did not invest one-third of its capital in bonds. This was changed in 1874 so as to reduce the requirement to 25%, with a maximum mandatory requirement of \$50,000. Notes

were taxed at the rate of 1% per annum. The banks obtained from the provision for circulation the benefit of what was described by critics as "double interest," being credited with the interest on bonds in the custody of the treasury department, and being also able to lend their notes to the public. But several deductions had to be made: notes could not be issued to the full par-value of the bonds; the tax of 1% upon circulation reduced by that amount the profit which would otherwise be earned; and the banks had to set aside in gold or other lawful money what was needed for redemption purposes and for reserves. As the banks suspended specie payments at the close of 1861 and great masses of government paper-money were issued, gold ceased to be a medium of exchange except in California, and the new banks redeemed their notes in government paper. The gold-value of the bank-notes, therefore, rose and fell with that of government notes until the resumption of payments in specie by the national treasury on the 1st of January 1879.

The amount of bank-notes in circulation proved in practice to be influenced largely by the price of bonds. The maximum originally set for bank circulation was \$300,000,000. This was increased in 1870 by \$54,000,000, and in 1875 the limit was removed. The circulation reached \$362,651,169 on the 1st of January 1883, but afterwards declined materially as bonds became scarce and the price rose. The fact that circulation could be issued to only 90% of the par-value of the bonds greatly reduced the net profits on circulation when the price of 4% bonds rose in 1889 above 129 and other classes of bonds rose in like ratio. The circulation of bank-notes fell as low as \$167,927,574 on the 1st of July 1891, but afterwards increased somewhat as the supply of bonds was increased to meet the treasury deficiencies of 1894-1896 and the expenses of the war with Spain.

The national banks supported the government cordially in the measures taken to bring about resumption of gold payments on the 1st of January 1879 under the law of 1875. The banks held more than \$125,000,000 in legal tender notes, of which sum nearly one-third was held in New York City. A run upon the treasury for the redemption of these notes would have exhausted the gold funds laboriously accumulated by secretary Sherman and compelled a new suspension. But the banks appointed a committee to co-operate with the treasury, declined to receive gold longer as a special deposit, and resolved to receive and pay balances without discrimination between gold and government notes. Thus resumption was accomplished without jar, and as early as the 17th of December 1878 gold sold at par in paper.

The silver legislation enacted by Congress in 1878 and 1890 caused uneasiness in banking circles, and the banks discriminated against silver dollars and silver certificates in their cash. When the treasury began to lose gold heavily, however, in 1893, a combination of leading bankers in New York, Boston, Philadelphia, Baltimore and Chicago turned over a large part of their holdings to replenish the government reserves. About 150 national banks suspended during the panic of 1893, but 84 of these afterwards resumed business. As in former periods of depression, the system suffered the greatest decline during the years of liquidation following the actual panic, the number of banks falling from 3856 on the 1st of June 1893 to 3585 on the 1st of June 1899, and aggregate capital falling during the same period from \$698,454,665 to \$610,028,895.

A new extension was given to the national banking system by the provisions of the gold standard law of 14th March 1900. Banks were authorized to issue circulation to the full par-value of bonds deposited, and the tax upon circulation was reduced from 1% to ½ of 1% in the case of circulation which was secured by the 2% refunding bonds, which were authorized by this law. By issuing 2% bonds in exchange for those paying a higher interest, at approximately the market-price, it became possible to obtain a given amount of notes upon a smaller investment in bonds, independent of other provisions of the law. Under these provisions the volume of notes outstanding, secured by bonds, which stood on the 31st of October 1899 at \$207,920,774, reached on the same date in 1900, \$298,829,064; in 1901, \$328,198,613; in 1902, \$335,783,189; in 1903, \$380,650,821; in 1904, \$424,530,581; in 1905, \$490,037,806; in 1906, \$536,933,169; and in 1907 \$562,727,614.

The lowest denomination of national bank-notes authorized by law is \$5, and not more than one-third of any bank's issues can be of this denomination. The government issues notes for \$1 and \$2, as well as for higher denominations. The largest amount of bank-notes of one denomination is in bills for \$10, which on the 31st of October 1907 constituted \$249,946,530 in total outstanding issues of \$609,905,441. Of this total circulation \$562,727,614 was secured by bonds, and the remainder, \$47,252,852, was covered by lawful money in the government treasury, deposited for the redemption and retirement of the notes as they might be received.

An important extension of the national system resulted from the authority given by the act of 1900 to incorporate national banks with a capital as low as \$25,000, in places having a population not in excess of 3000. The previous minimum limit had been \$50,000. Under this provision there were incorporated to the 31st of October 1907 2389 national banks with capitals of less than \$50,000, with aggregate capital of \$62,312,500, of which 272 banks were conversions of state and private institutions, 752 were reorganizations and 1365 were new institutions.

The national banks possess most of the powers of commercial banks, but are not permitted to hold real estate other than their banking houses, unless taken for debt. Five reports are required each year to the comptroller of the currency at dates selected by him without notice, and each bank is subject to the visitation of bank examiners acting under the comptroller. No reserves

[v.03 p.0348] against notes are required by existing law except 5%, which is kept in Washington for current redemption purposes. The redemption system is defective in that redemptions are not authorized at other places, and the notes reach the treasury on an average only about once in two years. For many years the banks were prohibited from retiring more than \$3,000,000 of notes monthly, but the limit was raised by an act of 4th March 1907 to \$9,000,000 per month.

Reserves are required against deposits to the amount of 25% in so-called "reserve cities," and 15% in what are called the "country banks" outside of reserve cities. Not all these amounts, however, are required to be kept in cash. The three central reserve cities, where cash is required, with only trifling deductions, are New York, Chicago and St Louis. In other reserve cities, which in 1908 numbered forty, the banks are permitted to deposit half their cash in national banks in central reserve cities, while country banks may deposit three-fifths of their cash in any reserve city. The shareholders of national banks are subject in case of liquidation to double liability upon their shares, and this is now the rule in most of the conservative state banking systems. National bank-notes are not legal tender, but are receivable by the government for all obligations except customs dues.

The panic of 1907 imposed a severe strain upon the cash resources of the banks of New York City, but did not cause any such considerable number of failures as occurred in 1893.

Payment of cheques in currency was suspended in New York on the 28th of October 1907, and continued until about the beginning of the year 1908. The panic was precipitated by overspeculation by a group of national banks, followed by the suspension of the Knickerbocker Trust Company on the 22nd of October with deposits of \$48,000,000. Then came runs on other companies, a deficit in the required reserves of New York banks of \$38,838,825 in the week of 2nd November, and arrangements for the importation of foreign gold to an amount which soon approached \$100,000,000. With an increase during the autumn of about \$77,000,000 in national bank circulation, a transfer of \$72,000,000 from the treasury to the banks, and a further decline in required reserves in New York during the next week, the amount of currency which was added to the circulation or disappeared during a few weeks of the panic amounted to more than \$275,000,000, or nearly one-tenth of the usual volume of circulation in the country. The total bank-note circulation on the 28th of December 1907 had risen to \$687,340,835; but this amount was abnormal and was reduced somewhat during the spring of 1908.

The position of the trust companies, especially those of the city of New York, was one of the disturbing features of the panic. These companies were comparatively a small factor in New York finance at the time of the panic of 1893. The capitalization of all the trust companies in the United States, even as late as 1897, was only \$106,968,253, and individual deposits were \$566,922,205. The capital of these companies had risen in 1907 to \$276,146,081 and their deposits to \$2,061,623,035. The trust companies of New York were required by the law of the state to maintain only 5% of their demand deposits in cash in their vaults. Whilst most of them had also large amounts on deposit in national banks, these reserves proved inadequate to sustain the vast mass of credit which was built upon them. The absolute amount of the reserves, however, was perhaps less important than the class of business to which some of the less conservative of these companies had committed themselves. Instead of keeping their assets liquid by purchases of commercial paper and loans on first-class negotiable securities, they had in some cases engaged in speculative underwritings and had locked up their funds in enterprises requiring a long time for their consummation.

It was these combined influences which led to distrust of the Knickerbocker Trust Company, and to the runs upon that company and others during the late days of October and early November. The result was to reduce the total resources of the forty-eight trust companies of Greater New York from \$1,205,019,700 on the 22nd of August 1907 to \$858,674,000 on the 19th of December 1907. Individual deposits subject to cheque fell from \$692,744,900 to \$437,733,400. Such a reduction of resources within so short a time, most of it being accomplished within a few weeks, has hardly ever been recorded in the history of banking, and the fact that the stronger companies were able to call in their cash and meet such demands was evidence to a certain extent that the criticisms upon them were exaggerated. The necessity for stronger reserves and for greater safeguards against speculative operations was so strongly impressed upon the public mind, however, that several restrictive measures were enacted at the session of the New York legislature in 1908, designed to prevent any abuses of this sort in the future.

The function of issuing notes, which is exclusively a privilege of national banks, has diminished in importance in America, as other methods of transferring credit have attained a wide development. This has not only been true of the national banks themselves, but has accounted for the development alongside the national banking system of state banks, private banks and trust companies, which have not had the privilege of note-issue, but have obtained other privileges sometimes greater than those of the national banks.

The aggregate resources of all classes of banks in the United States have greatly increased in recent years. The following table shows the increase in the chief items of the accounts of national banks for representative years from the reports made nearest to the beginning of the year:-

PROGRESS OF NATIONAL BANKS, 1865-1908

| Year. | No of Banks | Loans and Discounts. | Individual Deposits |
|-------|----------------|----------------------|------------------------|
| | | | |

| 1 400- | | | |
|--------|------|---------------|---------------|
| 1865 | 638 | \$166,448,718 | \$183,479,636 |
| 1870 | 1615 | 688,875,203 | 546,236,881 |
| 1875 | 2027 | 955,862,580 | 682,846,607 |
| 1880 | 2052 | 933,543,661 | 755,459,966 |
| 1885 | 2664 | 1,234,202,226 | 987,649,055 |
| 1890 | 3326 | 1,811,686,891 | 1,436,402,685 |
| 1895 | 3737 | 1,991,913,123 | 1,695,489,346 |
| 1897 | 3661 | 1,901,160,110 | 1,639,688,393 |
| 1899 | 3590 | 2,214,394,838 | 2,225,269,813 |
| 1900 | 3602 | 2,479,819,494 | 2,380,610,361 |
| 1901 | 3942 | 2,706,534,643 | 2,623,997,521 |
| 1902 | 4291 | 3,038,255,447 | 2,964,417,965 |
| 1903 | 4666 | 3,303,148,091 | 3,152,878,796 |
| 1904 | 5180 | 3,469,195,043 | 3,300,619,898 |
| 1905 | 5528 | 3,728,166,086 | 3,612,499,598 |
| 1906 | 5911 | 4,071,041,164 | 4,088,420,135 |
| 1907 | 6288 | 4,463,267,629 | 4,115,650,294 |
| 1908 | 6625 | 4,585,337,094 | 4,176,873,717 |

The combined returns of state and private banks, savings banks and loan and trust companies in the United States show a growth within a few years which is indicated by the principal items of their accounts:—

| Resources | | | | | |
|-----------|----------|--------|-------|------------|-----|
| | | | | | |
| LESOUNCES | Or OTAIL | DANKS. | INUSI | COMPANIES. | αc. |

| Items. | 1897. | 1907. |
|---------------------|---------------|----------------|
| Capital stock | \$380,090,778 | \$807,178,262 |
| Surplus and profits | 382,436,990 | 924,655,010 |
| Loans | 2,231,013,262 | 6,099,897,535 |
| Deposits | 3,324,254,807 | 8,776,755,207 |
| Total Resources | 4,258,677,065 | 11,168,514,516 |

The aggregate banking power of the United States, as computed by the comptroller of the currency in his annual report for 1907, increased from \$5,150,000,000 in 1890 to \$17,824,800,000 in 1907, and the banking power of foreign countries from \$10,835,000,000 to \$27,034,200,000, representing an increase for all reporting countries from \$15,985,000,000 to \$44,859,000,000.

The system of clearing cheques has attained a higher development in the United States than in any other country, except perhaps, Great Britain. Clearing-houses exist in about 112 leading cities, and the aggregate clearings for the year ending 30th September 1907 reached \$154,662,515,258. The New York Clearing-House inevitably does a large proportion of this business; its clearings constituted in 1906 67.2% of the total clearings in 55 of the larger cities. The volume of clearings fluctuates greatly with the volume of stock-exchange transactions and with the business prosperity of the country. An indication of these fluctuations at New York is afforded by the following table, taken from Conant's *Principles of Money and Banking*, brought down to 1907.

[v.03 p.0349]

Variations in Clearings at New York

| | Average | Per cent | |
|-------|--------------|-------------|--|
| Year. | Daily | Balances to | Remarks. |
| | Clearings. | Clearings. | |
| 1870 | \$90,274,479 | 3.72 | |
| 1873 | 115,885,794 | 4.15 | Great business activity. |
| 1874 | 74,692,574 | 5.62 | Industrial depression. |
| 1881 | 159,232,191 | 3.66 | Renewal of railway building. |
| 1885 | 82,789,480 | 5.12 | Results of bank panic. |
| 1890 | 123,074,139 | 4.65 | Business expansion. |
| 1894 | 79,704,426 | 6.54 | Depression following panic. |
| 1896 | 96,232,442 | 6.28 | Free silver panic. |
| 1899 | 189,961,029 | 5.37 | Renewed confidence and activity. |
| 1901 | 254,193,639 | 4.56 | Culmination of industrial flotations. |
| 1904 | 195,648,514 | 5.20 | Diminished stock-exchange and business activity. |
| 1906 | 342,422,773 | 3.69 | Stock-market activity. |

The Clearing-House Committee of the New York Clearing-House exercises a powerful influence over the banking situation through its ability to refuse aid in emergencies to a bank which is unwisely conducted. This power was used in the panic of 1907 to eliminate several important, but speculative, financial interests from control of national banks. Only national and state banks and the sub-Treasury were members of the Clearing-House at this time. Their weekly reports of condition were awaited every Saturday as an index of the state of the money-market and the exchanges; but this index was incomplete and sometimes misleading, because regular weekly

reports were not made by trust companies. It was announced early in 1908 by the state superintendent of banking that he would exercise a power vested in him by law to require weekly reports in future from trust companies, so that the two classes of reports would present a substantially complete mirror of banking conditions in New York.

Authorities.—William M. Gouge, A History of Paper Money and Banking in the United States (Philadelphia, 1833); Condy Raguet, A Treatise on Currency and Banking (Philadelphia, 1840); J. S. Gibbons, The Banks of New York, their Dealers, the Clearing-House and the Panic of 1857 (New York, 1858); Albert S. Bolles. Financial History of the United States (3 vols., New York, 1884-1886); Charles F. Dunbar, Chapters on the Theory and History of Banking (New York and London, 1891); Horace White, Money and Banking (Boston, 1902); Charles A. Conant, A History of Modern Banks of Issue (New York, 1896); Alexander D. Noyes, Thirty Years of American Finance (New York, 1898); Davis Rich Dewey, Financial History of the United States (New York and London, 1903); John C. Schwab, The Confederate States of America, 1861-1865 (New York, 1901); David Kinley, The Independent Treasury of the United States (New York, 1893); Report of the Monetary Commission of the Indianapolis Convention (Chicago, 1898); Charles A. Conant, The Principles of Money and Banking (2 vols., New York, 1905); William G. Sumner, A History of American Currency (New York, 1884); Amos Kidder Fiske, The Modern Bank (New York, 1904); William G. Sumner, A History of Banking in the United States (New York, 1896), being vol. i. in A History of Banking in All the Leading Nations; John Jay Knox, History of Banking in the United States (rev. ed., New York, 1900); and R. C. H. Catterall, The Second Bank of the United States (Chicago, 1903).

Much statistical information is contained in the annual reports of the comptroller of the currency of the United States, published annually at Washington.

(C. A. C.)

English Law affecting Banks and their Customers

Issue of Notes.—The legislation which culminated in the Bank Charter Acts of 1844 and 1845 secured to the Bank of England the absolute monopoly of the note issue within the city of London and a 3-m. radius. Outside that radius, and within 65 m. of the city, there is a concurrent right in banks, consisting of six or less than six persons, established before 1844, and issuing notes at that date; beyond the 65-m. radius the privilege may be exercised by all banks established before 1844, and then issuing notes, who have not since lost their right to do so by bankruptcy, abandonment of business, or temporary suspension of issue. According to some authorities, the effect of 20 and 21 Vict. cap. 49, sec. 12 [re-enacted Companies Consolidation Act 1908, sec. 286 (d)] was to sanction the increase in the constitution of any bank issuing notes outside the 3-m. and within the 65-m. radius from six to ten persons without affecting the power to issue notes. The rule as formulated above is, however, that enunciated by Bowen J. in Capital and Counties Bank v. Bank of England, 1889; 61 L.T. 516. The increase in the number of joint-stock banks and the gradual absorption of the smaller and older concerns have had the effect of minimizing the output of notes other than those issued by the Bank of England, and, as exemplified by the case of The Attorney-General v. Birkbeck, 12 Q.B.D. 57, it would seem impossible to devise any scheme by which the note-issuing power of an absorbed bank could be continued to the new or amalgamated body. But a bank having the right would not necessarily lose it by absorbing other banks (Capital and Counties Bank v. Bank of England). Foreign banks may establish branches in Great Britain on complying with the regulations imposed on them by the Companies Consolidation Act 1908, but cannot apparently issue notes, even though payable abroad.

Deposit Business.—The term "bank of deposit" gives a mistaken idea of the real relation between banker and customer. So long ago as 1848 it was decided by the House of Lords in *Foley* v. *Hill*, 2 H. of L. 28, that the real relation between banker and customer was that of debtor and creditor, not in any sense that of trustee and *cestui que trust*, or depositee and depositor, any sense that of trustee and *cestui que trust*, or depositee and depositor.

Relation between banker and customer.

in any sense that of trustee and *cestul que trust*, or depositee and depositor, as had been formerly supposed and contended. The ordinary process by which a man pays money in to his account at his banker's is in law simply lending the money to the banker; it fixes the banker with no fiduciary relation, and he is in no way responsible to the customer for the use he may make of the money so paid in. And as being a mere debt, a customer's right to recover money paid in is barred on the expiration of six years by the Statute of Limitations, if there has been no payment meantime on account of principal or interest, and no acknowledgment sufficient to bar the statute (*Pott* v. *Clegg*, 16 M. & W. 321). Such a state of affairs, however, is hardly likely to arise, inasmuch as, in the absence of specific appropriation, earlier drawings out are attributed to the earlier payments in, as in the ordinary case of current accounts, and so the items on the credit and debit side cancel each other. An apparent exception to this system of appropriation exists in cases where a man wrongfully pays into his own account moneys held by him in a fiduciary capacity. In such circumstances he is presumed to have drawn out his own moneys rather than those affected by the trust, and so long as the account is in credit, any balance will be attributed to the trust money. As between contending claims to the money, based on different breaches of trust, the ordinary rule of appropriation will apply.

It has often been suggested that the only method of withdrawing money from a banker is by cheque, that the presentation of a cheque is a condition precedent to the liability of the banker to repay. This is not so; such view being inconsistent with the cases establishing the effect of the Statute of Lin

heques.

being inconsistent with the cases establishing the effect of the Statute of Limitations on money left in a banker's hands, and with the numerous cases in which a balance at a bank has been

attached as a simple and unconditional debt by a garnishee order, as, for instance, in Rogers v. Whiteley, 1892, A.C. 118. The banker's position with regard to cheques is that, superadded to the relation of debtor and creditor, there is an obligation to honour the customer's cheques provided the banker has a sufficient and available balance in his hands for the purpose (Foley v. Hill). If, having such funds in his hands, the banker dishonours a cheque, he is liable to the customer in substantial damages without proof of actual injury having accrued (Rolin v. Steward, 14 C.B. 595). Where several cheques are presented simultaneously and the available balance is insufficient to pay all, the banker should pay as many as the funds will cover, and is not bound to discriminate between particular cheques. It would seem a legitimate condition that a cheque should be drawn in the ordinary recognized form, not in one raising any question or doubt as to its validity or effect. Cheques drawn to "wages or order," "petty cash or order," or the like, are common, and are sometimes regarded as payable to bearer. Such payees are not, however, "fictitious or non-existent persons," so as to render the cheques payable to the bearer under sec. 7, subs. 3 of the Bills of Exchange Act 1882, nor can such payees endorse. Some banks refuse to pay such cheques, and it is conceived they are justified in so doing. Money paid in so shortly before the presentation of the cheque that there would not have been time to pass it through the books of the bank would not be treated as available for drawing against. If a person have an account at one branch of a bank, he is not entitled to draw cheques on another branch where he has either no account or is overdrawn, but the bank has, as against the customer, the right to combine accounts at different branches and treat them as one account (Garnet v. McEwen, L.R. 8 Ex. 10). Funds are not available so long as a garnishee order, founded on a judgment against the customer, is pending, since it attaches all moneys on current account irrespective of the amount of the judgment (Rogers v. Whiteley).

[v.03 p.0350]

The very questionable practice of post-dating cheques has been the source of considerable doubt and inconvenience to bankers. The use of such documents enables the drawer to obtain the results of a bill at a fixed future date without the expense of a regular bill-stamp. But the Bills of Exchange Act 1882, sec. 13, subs. 1, provides that "a bill is not invalid by reason only that it is ante-dated or post-dated, or that it bears date on a Sunday." The banker cannot therefore refuse to pay a cheque presented after the apparent date of its issue on the ground that he knows it to have been post-dated. On the other hand, he is entitled and indeed bound to refuse payment if such a cheque is presented before the apparent date of its issue (*Morley* v. *Culverwell*, 7 M. & W. at p. 178). Revocation of authority to pay a cheque must come to the banker's conscious knowledge and be unequivocal both in terms and method of communication. He is not bound to act on an unconfirmed telegram (*Curtice* v. *London City & Midland Bank* [1908], 1 K.B. 293). The banker's authority to pay cheques is terminated by the death, insanity or bankruptcy of the customer, or by notice of an available act of bankruptcy committed by him.

The banker is bound to observe secrecy with respect to the customer's account, unless good cause exists for disclosure, and the obligation does not cease if the account becomes overdrawn (Hardy v. Veasey, L.R. 3 Ex. 107). In England a cheque is not an assignment of funds in the banker's hands (Bills of Exchange Act 1882, sec. 53). The holder of the cheque has therefore no claim on the banker in the event of payment being refused, his remedy being against the drawer and endorser, if any. On this section is also based the custom of English bankers not to pay part of the amount of a cheque where there are funds, though not sufficient to meet the whole amount. The section does not apply to Scotland, where it would seem that the bank is bound to pay over what funds it has towards satisfaction of the cheque. A banker is entitled to hold paid cheques as vouchers until there has been a settlement of account between him and the customer. The entries in a pass-book constitute prima facie evidence against the banker, and when returned by the customer without comment, against him; but the proposition that such return constitutes a settlement of account has been much disputed. Indeed where forgery is the ground of repudiation of a cheque, no dealings or omissions of the customer with regard to the pass-book would seem to preclude him from objecting to being debited and throwing the loss on the banker (Kepitigalla Rubber Co. v. National Bank of India, 25 Times L.R. 402). As against the banker, however, credit entries in the pass-book cannot be disputed if the customer has altered his position in reliance thereon, and cheques drawn against an apparent balance must be honoured (Holland v. Manchester & Liverpool District Bank, 25 Times L.R. 386).

The rule by which the holder of a cheque has no direct recourse against the banker who dishonours it, holds good even where the banker has before issue marked the cheque as good for the amount, such marking not amounting to an acceptance by the banker. As between banker and banker, however, such marking or certifying probably amounts to a binding representation that the cheque will be paid, and, if done by request of the drawer, the latter cannot subsequently revoke the authority to pay. In certain circumstances, marking at the instance of the person presenting the cheque for payment may amount to an undertaking by the banker to hold the money for his benefit (*In re Beaumont* [1902], 1 Ch. p. 895).

A banker either paying or collecting money on a cheque to which the person tendering it for payment or collection has no title or a defective title is *prima facie* liable to the true owner for conversion or money had and received, notwithstanding he acted in perfect good faith and derived no benefit from the operation. Payment of an open cheque, payable to bearer either originally or by endorsement, is, however, in all cases a good payment and discharge (*Charles* v. *Blackwell*, 2 C.P.D. at p. 158). Limited protection in other cases has been extended by legislation to the banker with regard to both payment and collection of cheques, usually on the principle of counterbalancing some particular risk imposed on him by enactments primarily designed to safeguard the public.

By sec. 19 of the Stamp Act 1853, the banker paying a draft or order payable to order on demand, drawn upon him, was relieved from liability in the event of the endorsement having been forged or unauthorized. This enactment was not repealed by the Bills of Exchange Act 1882, and, in London City & Midland Bank v. Gordon (1903), A.C. 240, was held to cover the case of drafts drawn by a branch of a bank on its head office. Sec. 60 of the Bills of Exchange Act 1882 extends like protection to the banker in the case of cheques, the definition of which therein as "bills drawn on a banker payable on demand" debars drafts of the above-mentioned description. Such definition, involving the unconditional character of the instrument, also precludes from the protection of this section the documents now frequently issued by corporations and others, which direct bankers to make payments on a specific attached receipt being duly signed (London City & Midland Bank v. Gordon). Sec. 17 of the Revenue Act 1883, however, applies to these documents the crossed cheques sections of the Bills of Exchange Act 1882 (see Bavius, Jr., & Sims v. London & South-Western Bank [1900], 1 Q.B. 270), while denying them the position of negotiable instruments, and a banker paying one of them crossed, in accordance with the crossing and in the absence of any indication of its having been transferred, could probably claim immunity under sec. 80. The Bills of Exchange Act 1882 contains no direct prohibition against a banker paying a crossed cheque otherwise than in accordance with the crossing, but if he do so he is liable to the true owner for any loss suffered by him in consequence of such payment (sec. 79), and is probably unable to charge his customer with the amount. A banker paying a crossed cheque in accordance with its ostensible tenor obtains protection under sec. 80 and the proviso to sec. 79. Questions have arisen as to the bearing of the crossed cheques sections when a crossed cheque drawn on one branch of a bank is paid in for collection by a customer at another branch; but the transaction is so obviously a legitimate and necessary one that either by the collecting branch may be regarded as a separate bank for this purpose, or sec. 79 may be ignored as inapplicable (Gordon v. London City & Midland Bank [1902], 1 K.B. 242 C.A.).

The collection of crossed cheques for a customer being virtually incumbent on a banker, qualified immunity is accorded him in so doing by sec. 82, a final exposition of which was given by the House of Lords in London City & Midland Bank v. Gordon (1903), A.C. 240. To come within its provisions, the banker must fulfil the following conditions. He must receive the cheque from, and the money for, a customer, i.e. a person with whom he has definite and existing business relations (see Great Western Ry. Co. v. London & County Bank [1901], A.C. 414). He must take the cheque already crossed generally or specially to himself. His own crossing under sec. 77 is absolutely inefficacious in this connexion. He must take the cheque and receive the money in good faith and without negligence. Negligence in this relation is the omission to exercise due care in the interest of the true owner, not necessarily the customer. To avoid this disqualification of negligence, the banker must see that the endorsements, where necessary, are ostensibly correct; he must satisfy himself of the authority where an endorsement is per procuration; he must not take for private account a cheque which on its face indicates that the holder is in possession of it as agent, or in an official capacity, or for partnership purposes (Hannan's Lake View Central Ld. v. Armstrong & Co., 16 Times L.R. 236; Bevan v. National Bank, 23 Times L.R. 65); he must not take a cheque marked "account payee" for an account other than that indicated (Bevan v. National Bank). It is further demonstrated by the Gordon case that the banker only secures protection so long as he is acting strictly as a conduit pipe, or as agent for the customer. If he put himself in the position of owner of the cheque, he no longer fulfils the condition of receiving the money only for the customer. In the Gordon case, adoption of the not uncommon practice of crediting cheques as cash in the bank's books before the money was actually received was held equivalent to taking them as transferee or owner, and to debar the bank from the protection of sec. 82. The anxiety and inconvenience caused to bankers by this unexpected decision was ultimately removed by the Bills of Exchange (Crossed Cheques) Act 1906, which enacts that a banker receives payment of a crossed cheque for a customer within the meaning of sec. 82 of the Bills of Exchange Act 1882, notwithstanding that he credits his customer's account with the amount of the cheque before receiving payment thereof. Apparently the scope of this act must be confined to its immediate object, and it does not affect the relations and rights between the banker and his customer or parties to the cheque arising from such crediting as cash. For instance, the customer, in the absence of agreement to the contrary, may at once draw against cheques so credited, while the banker may still debit the customer with the amount of the cheque if returned unpaid, or sue the drawer or indorser thereon.

[v.03 p.0351]

The protection to the collecting banker is in no way affected by the cheque being crossed "not negotiable," or by the nature of the fraud or crime by which the cheque was obtained by the customer or any previous possessor, although there are dicta which have been interpreted in the contrary sense. Nor does the fact that the customer is overdrawn deprive the banker of the character of a collecting agent, unless the cheque be definitely given and taken in reduction of such overdraft. Where the conditions requisite for protection exist, the protection covers not only the receipt of the money, but all operations usual in business and leading up to such receipt, on the basis of the customer's title being unimpeachable. The provisions of the crossed cheques sections of the Bills of Exchange Act 1882 are extended to dividend warrants by sec. 95 of that act, and to certain orders for payment issued by a customer of a banker by sec. 17 of the Revenue Act 1883, as before stated. But the wording of the Bills of Exchange (Crossed Cheques) Act 1906, specifying as it does cheques alone, appears to exclude documents of both these classes from its operation. With regard to the orders for payment, inasmuch as the same section which brings them within the crossed cheques sections expressly provides that they shall not be negotiable, a banker would probably be protected only in taking them from the specified payee, though this distinction has been ignored in some recently decided cases.

Where a banker incurs loss through forgery or fraud in circumstances not covered by statutory protection, his right to relief, if any, must depend on general principles. He cannot charge his customer with payments made on

a forgery of that customer's signature, on the ground either that he is presumed to know such signature or that the payment is unauthorized. But if the customer has accredited the forgery, or, having knowledge or reasonable ground for belief that it has been committed, has failed to warn the banker, who has thereby suffered loss or prejudice, the customer will be held estopped from disputing the banker's right to debit him with the amount (Vagliano v. Bank of England [1891], A.C. 107; McKenzie v. British Linen Co. 6 A.C. 82; Ewing v. Dominion Bank [1904], A.C. 806). The doctrine of the fictitious person as payee may also exonerate a banker who has paid an order bill to a wrongful possessor. Payment on a forgery to an innocent holder is payment under mistake of fact; but the ordinary right of the payor to recover money so paid is subordinated to the necessity of safeguarding the characteristics of negotiability. Views differ as to whether the recovery is precluded only where the opportunity of giving notice of dishonour is lost or prejudiced by delay in reclaiming payment, or whether mere possibility of damage is sufficient (cf. London & River Plate Bank v. Bank of Liverpool [1896], 1 Q.B. 7, and Imperial Bank of Canada v. Bank of Hamilton [1903], A.C. 49).

Cases have frequently arisen where the carelessness of a customer in filling up cheques has enabled a person to fraudulently increase the sum for which such cheques were originally drawn. In Colonial Bank of Australasia v. Marshall [1906], A.C. 559, the judicial committee of the privy council held that the affording such facilities for forgery was no breach of the customer's duty to his banker, and that the latter was not entitled to debit the customer with more than the original amount. As before stated, the customer's dealings with the pass-book cannot, in the present state of the authorities, be relied on as debarring him from disputing unauthorized payments appearing therein.

The payment of bills accepted payable at the bank is not, like the payment Custody of valuables. of cheques, an essential obligation of the banker, and the risk involved is enhanced by the fact that the banker must pay or refuse payment at once,

no interval being allowed for verification of endorsements. The abolition or modification of the practice has frequently been advocated, but it is one of the facilities which competition compels bankers to extend to their customers. On the same basis stands the receipt of a customer's valuables for safe custody. The question of the banker's responsibility for the loss of goods so deposited with him was raised, but not decided, in an action brought by Mrs Langtry against the Union Bank of London in 1896. Certain jewels belonging to her had been delivered up by the bank to an unauthorized person on a forged order. The case was settled; but bankers being desirous to ascertain their real position, many legal opinions were taken on the point, and after consideration of these, the Central Association of Bankers issued a memorandum, in which they stated that the best legal opinion appeared to be that a distinction must be drawn between cases in which valuables were by mistake delivered to the wrong person and cases in which they were destroyed, lost, stolen or fraudulently abstracted, whether by an officer of the bank or some other person. That in the former case the question of negligence did not arise, the case being one of wrongful conversion of the goods by a voluntary act for which the bank was liable apart from any question of negligence. That, in the second case, that of loss or theft, the banker, being a gratuitous bailee, would only be liable if he had failed to use such care as an ordinary prudent man would take of valuables of his own. The latter rule is practically that laid down in Giblin v. MacMullen, L.R. 2 P.C. 318, but in estimating the amount of care to be taken by the banker, the nature of the goods, if known or suspected, and the exceptional means of protection at the disposition of bankers, such as strong-rooms, must be taken into consideration. Methods of obviating both classes of risk by means of special receipts have frequently been suggested, but such receipts do not appear to have come into general use.

Theoretically, bankers are supposed to refuse accounts which are either expressedly or are known to be trust accounts. In practice, however, it is by no means uncommon to find accounts opened with a definite heading indicating the fiduciary capacity. In other cases, circumstances exist which affect the banker with notice of that capacity. In either case, however, the obligation to honour the customer's cheque is the predominant factor, and the banker is not bound or entitled to question the propriety or object of the cheque, unless he has very clear evidence of impending fraud (Gray v. Johnston, L.R. 3 H. of L. 1). Even though the banker have derived some personal benefit from the transaction, it cannot be impeached unless the banker's conduct amount in law to his being party or privy to the fraud, as where he has stipulated or pressed for the settlement or reduction of an ascertained overdraft on private account, which has been effected by cheque on the trust account (Coleman v. Bucks & Oxon Union Bank [1897], 2 Ch. 243). A banker is entitled, in dealing with trust moneys, known to be such, to insist on the authority of the whole body of trustees, direct and not deputed, and this is probably the safest course to adopt. Scarcely larger responsibility devolves on Joint Stock Banks appointed custodian trustees under the Public Trustee Act 1906, a remunerative position involving custody of trust funds and securities, and making and receiving payments on behalf of the estate, while leaving the active direction thereof in the hands of the managing trustees.

[v.03 p.0352]

Other incidents of the ordinary practice of banking are the discounting of bills, the keeping of deposit accounts, properly so called, and the making of Bill-discounting. advances to customers, counting either by way of definite loan or arranged overdraft. So far as the discounting of bills is concerned, there is little to differentiate the

position of the banker from that of any ordinary bill-discounter. It has been contended, however, that the peculiar attribute of the banker's lien entitled him to hold funds of the customer against his liability on current discounted bills. This contention was ultimately disposed of by *Bowen* v. *Foreign & Colonial Gas Company*, 22 W.R. 740, where it was pointed out that the essential object of a customer's discounting bills with his banker was to feed the current account, and that a possible liability constituted no set-off against an existing debt. Whether a particular bill has been taken for discount or collection is a question of fact. As in the payment of bills, so in the collection of them, there is no statutory protection whatever for the banker; as against third parties he can only rely either on the customer's title or his own as a holder for value, if no forged endorsement intervene and he can establish a consideration.

A deposit account, whether at call or on fixed notice, does not constitute any fiduciary relation between the depositor and the banker, but merely a debt due from the latter to the former. It has been suggested that cheques can be drawn against deposit account on call, and, though a banker might safely honour such a cheque, relying, if necessary, on his right of lien or set-off, there appears no legal right in the customer to enforce such payment. Deposit receipts given by bankers are exempt from stamp duty, even though they contain an undertaking with respect to payment of principal and interest. They are clearly not negotiable instruments, but it is difficult to deduce from the cases how far dealings with them may amount to an equitable assignment of the moneys they represent. Probably deliberate definite transfer, coupled with endorsement, would confer an effective title to such moneys. Where, as is not uncommon, the form of deposit note includes a cheque, the banker could not refuse to pay were the cheque presented and any superadded formalities complied

There is no obligation on a banker to permit his customer to overdraw, apart from agreement express or implied from course of business. Drawing a cheque or accepting a bill payable at the banker's which there are not funds meet is an implied request for an overdraft, which the banker may or

Overdrafts and advances.

may not comply with. Interest is clearly chargeable on overdrafts whether stipulated for or not. There is no direct authority establishing this right in the banker, and interest is not usually recoverable on mere debts, but the charge is justifiable on the ground of the universal custom of bankers, if not otherwise. The charging of compound interest or interest with periodical rests has been supported where such system of keeping the accounts has been brought to the notice of the customer by means of the pass-book, and not objected to by him, but in the present attitude of the courts towards the pass-book some further recognition would seem necessary. Such system of charging interest, even when fully recognized, only prevails so long as the relation of banker and customer, on which it is founded, continues in force; the taking a mortgage for the existing debt would put an end to it.

The main point in which advances made by bankers differ from those made by other people is the exceptional right possessed by bankers of securing repayment by means of the banker's lien. The banker's lien is part of the law merchant and entitles him, in the absence of agreement express or implied to the contrary, to retain and apply, in discharge of the customer's liability to him, any securities of the customer coming into his possession in his capacity as banker. It includes bills and cheques paid in for collection (Currie v. Misa, 1 A.C. 564). Either by virtue of it, or his right of set-off, the banker can retain moneys paid in by or received for the credit of the customer, against the customer's debt to him. Goods deposited for safe custody or moneys paid in to meet particular bills are exempt from the lien, the purpose for which they come to the banker's hands being inconsistent with the assertion of the lien. The existence of the banker's lien entitles him to sue all parties to bills or cheques by virtue of sec. 27, subs. 3 of the Bills of Exchange Act, and to the extent of his advances his title is independent of that of the previous holder. Moreover, the banker's lien, though so termed, is really in effect an implied pledge, and confers the rights of realization on default pertaining to that class of bailment. But with regard to the exercise of his lien, as in many other phases of his relation to his customer, the banker's strict rights may be curtailed or circumscribed by limitations arising out of course of business. The principle, based either on general equity or estoppel and independent of definite agreement or consideration, requires that when dealings between banker and customer have for a reasonable space of time proceeded on a recognized footing, the banker shall not suddenly break away from such established order of things and assert his strict legal rights to the detriment of the customer. By the operation of this rule, the banker may be precluded from asserting his lien in particular cases, as for instance for an overdraft on one account against another which had habitually been kept and operated on separately. It equally prevents the dishonouring of cheques in circumstances in which they have hitherto been paid independent of the actual available balance.

Restrictions arising from course of business can of course be put an end to by the banker, but only on reasonable notice to the customer and by providing for outstanding liabilities undertaken by the latter in reliance on the continuance of the pre-existing state of affairs (see *Buckingham* v. *London & Midland Bank*, 12 Times L.R. 70). As against this, the banker can, in some cases, fortify his position by appeal to the custom of bankers. The validity of such custom, provided it be general and reasonable, has frequently been recognized by the courts. Any person entering on business relations with a banker must be taken to contemplate the existence of such custom and implicitly agree that business shall be conducted in accordance therewith. Practical difficulty has been suggested with regard to proof of any such custom not already recognized in law, as to how far it can be established by the evidence of one party, the bankers, unsupported by that

members of the outside public, in most cases impossible to obtain. It is conceived, however, that on the analogy of local custom and the Stock Exchange rules, such outside evidence could be dispensed with, and this is the line apparently indicated with relation to the pass-book by the court of appeal in Vagliano's case (23 Q.B.D. at p. 245). The unquestionable right of the banker to summarily debit his customer's account with a returned cheque, even when unindorsed by the customer and taken by the banker in circumstances constituting him a transferee of the instrument, is probably referable to a custom of this nature. So is the common practice of bankers to refuse payment of a so-called "stale" cheque, that is, one presented an unreasonable time after its ostensible date; although the fact that some banks treat a cheque as stale after six months, others not till after twelve, might be held to militate against the validity of such custom, and lapse of time is not included by the Bills of Exchange Act among the matters working revocation of the banker's duty, and authority to pay his customer's cheque. Indirectly, this particular custom obtains some support from sec. 74 (2) of the Bills of Exchange Act, although the object of that section is different.

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That section does, however, import the custom of bankers into the reckoning of a reasonable time for the presentation of a cheque, and with other sections clears up any doubts which might have arisen on the common law as to the right of the holder of a cheque, whether crossed or not, to employ his banker for its collection, without imperilling his rights against prior parties in case of dishonour. On dishonour of a cheque paid in for collection, the banker is bound to give notice of dishonour. Being in the position of an agent, he may either give notice to his principal, the customer, or to the parties liable on the bill. The usual practice of bankers has always been to return the cheque to the customer, and sec. 49, subs. 6 of the Bills of Exchange Act is stated to have been passed to validate this custom. Inasmuch as it only provides for the return of the dishonoured bill or cheque to the drawer or an endorser it appears to miss the case of a cheque to bearer or become payable to bearer by blank endorsement prior to the customer's.

Where a bank or a banker takes a mortgage, legal or equitable, or a guarantee as cover for advances or overdraft, there is nothing necessarily differentiating the position from that of any other mortgagee or guaranteed party. It has, however, fallen to banks to evoke some leading decisions with respect to the former class of security. In London Joint Stock Bank v. Simmons ([1892], A.C. 201) the House of Lords, professedly explaining their previous decision in Sheffield v. London Joint Stock Bank, 13 A.C. 333, determined that negotiable securities, commercial or otherwise, may safely be taken in pledge for advances, though the person tendering them is, from his known position, likely to be holding them merely as agent for other persons, so long as they are taken honestly and there is nothing tangible, outside the man's position, to arouse suspicion. So again in Lloyd's Bank v. Cooke [1907], 1 K.B. 794, the bank vindicated the important principle that the common law of estoppel still obtains with regard to bills, notes and cheques, save where distinctly annulled or abrogated by the Bills of Exchange Act, and that therefore a man putting inchoate negotiable instruments into the hands of an agent for the purpose of his raising money thereon is responsible to any one taking them bona fide and for value, although the agent may have fraudulently exceeded and abused his authority and the case does not fall within the provisions of the Bills of Exchange Act.

With regard to guarantees, the main incidents peculiarly affecting bankers are the following. The existence of a guarantee does not oblige the banker to any particular system of keeping the account. So long as it is not unfairly

Guarantees.

manipulated to the detriment of the guarantor, there is no obligation to put moneys paid in, without appropriation, to the guaranteed rather than to the unguaranteed account, and on the termination of a guarantee, the banker may close the account, leaving it to be covered by the guarantee, and open a new one with the customer, to which he may devote payments in, not otherwise appropriated. Where by its nature or terms a continuing guarantee is revocable either summarily or on specified notice, difficult questions may arise on such revocation as to the banker's duty and obligations towards the customer, who has probably incurred liabilities on the strength of the credit afforded by the guarantee. Although the existence of a guarantee does not bind the banker to advance up to the prescribed limit, he could not well, on revocation, immediately shut off all facilities from the customer without notice, while subsequent purely voluntary advances might not be covered by the guarantee. These contingencies should therefore be fully provided for by the guarantee, particularly the crucial period of the pendency of notice.

Authorities.—The Institute of Bankers (London), *Questions on Banking Practice* (6th ed., 1909); J. Douglas Walker, *A Treatise on Banking Law* (2nd ed., 1885); Chalmers, *Bills of Exchange* (7th ed., 1909); Sir J. R. Paget, *The Law of Banking* (2nd ed., 1908); H. Hart, *The Law of Banking* (2nd ed., 1906).

(J. R. P.)

- [1] A translation of the act of the 3rd of May 1619 may be found in the appendix to the *Quarterly Journal of Economics* (Boston, U.S.A.) for April 1892. These documents present a distinct picture of banking in its true sense.
- [2] The clearest account of its early days is found in Thorold Rogers' *History of the First Nine Years of the Bank of England.*
- [3] The date 1876 is taken as being that when the Imperial Bank of Germany came into full operation.
- [4] "The Grasshopper" in Lombard Street, by John Biddulph Masters (1892).

- [5] See *Vorträge und Aufsätze hauptsächlich aus dem Handels- und Wechselrecht,* von Dr R. Koch, pp. 163-164.
- [6] The imperial treasury is bound to pay the state notes in cash at any time when this is required, but an independent fund of cash set apart for this purpose does not exist. See *Handwörterbuch der Staatswissenschaften*, vol. v. art. "Papiergeld," p. 97 (Jena, 1893; ed. J. Conrad, L. Elster, W. Lexis and E. Löning).

BANKSIA, an Australian genus of shrubs and trees (natural order Proteaceae), with leathery leaves often deeply cut and handsome dense spikes of flowers. It is named after Sir Joseph Banks (q.v.). The plants are grown in England for their handsome foliage as evergreen greenhouse shrubs.

BANKURA, a town and district of British India, within the Burdwan division of Bengal. The town has a population of 20,737. The district has an area of 2621 sq. m., and in 1901 its population was 1,116,411, showing an increase of 4% in the decade. It is bounded on the N. and E. by Burdwan district; on the S. by Midnapur district; and on the W. by Manbhum district. Bankura forms a connecting link between the delta of the Ganges on the E. and the mountainous highlands of Chota Nagpur on the W. Along its eastern boundary adjoining Burdwan district the country is flat and alluvial, presenting the appearance of the ordinary paddy lands of Bengal. Going N. and W., however, the surface gradually rises into long undulating tracts; rice lands and swamps give way to a region of low thorny jungle or forest trees; the hamlets become smaller and more scattered, and nearly disappear altogether in the wild forests along the western boundary. Large quantities of lac and tussur silk are gathered in the hilly tract. The stone quarries and minerals are little worked. There are indigo factories and two coal-mines. Both cotton and silk are woven, and plates, &c., are carved from soap-stone. The old capital of the country was at Bishnupur, which is still the chief centre of local industries. The north-east part of the district is skirted by the East Indian railway beyond the river Damodar. The Midnapur-Jherria line of the Bengal-Nagpur railway passes through the district, and there is a line from Howrah to Bankura. The climate of Bankura is generally healthy, the cold season being bracing, the air wholesome and dry, and fogs of rare occurrence. The district is exposed to drought and also to destructive floods. It suffered in the famines of 1866, 1874-1875 and 1896-1897. The temperature in the hot season is very oppressive and relaxing. The Bishnupur raj was one of the largest estates in Bengal in the end of the 18th century, but it was sold for arrears of revenue shortly after the conclusion of the permanent settlement in 1793.

BANN, the principal river in the north of Ireland. Rising in the Mourne mountains in the south of the Co. Down it runs N.W. until it enters Lough Neagh (q.v.), which it drains N.N.W. to an estuary at Coleraine, forming Lough Beg immediately below the larger lough. The length of its valley (excluding the lesser windings of the river) is about 90 m. The total drainage area, including the other important feeders of Lough Neagh, is about 2300 sq. m., extending westward to the confines of the Co. Fermanagh, and including parts of the Cos. Down and Antrim, Armagh and Monaghan, Tyrone and Londonderry. The river has valuable salmon fisheries, but is not of much importance for navigation. Above Lough Neagh it is known as the Upper Bann and below as the Lower Bann.

BANNATYNE, GEORGE (1545-?1608), collector of Scottish poems, was a native of Newtyle, Forfarshire. He became an Edinburgh merchant and was admitted a burgess in 1587. Some years earlier, in 1568, when the "pest" raged in the capital, he retired to his native county and amused himself by writing out copies of poems by 15th and early 16th century Scots poets. His work extended to eight hundred folio pages, divided into five parts. The MS. descended to his only daughter Janet, and later to her husband's family, the Foulises of Woodhall and Ravelston, near Edinburgh. From them it passed to the Advocates' library, where it is still preserved. This MS., known as the "Bannatyne Manuscript," constitutes with the "Asloan" and "Maitland Folio" MSS. the chief repository of Middle Scots poetry, especially for the texts of the greater poets Henryson, Dunbar, Lyndsay and Alexander Scott. Portions of it were reprinted (with modifications) by Allan Ramsay in his *Ever Green* (1724), and later, and more correctly, by Lord Hailes in his *Ancient Scottish Poems* (1770). The entire text was issued by the Hunterian Club (1873-1902) in a handsome and generally accurate form. The name of Bannatyne was honoured in 1823 by the foundation in Edinburgh of the Bannatyne Club, devoted to the publication of historical and literary material from Scottish sources. The thirty-third issue of the club (1829) was *Memorials of George Bannatyne* (1545-1608), with a memoir by Sir Walter Scott and an account of the MS. by David Laing.

See also Gregory Smith, Specimens of Middle Scots (1902).

BANNERET (Fr. banneret, from bannière, banner, elliptical for seigneur or chevalier banneret, Med. Lat. banneretus), in feudalism, the name given to those nobles who had the right to lead their vassals to battle under their own banner. Ultimately bannerets obtained a place in the feudal hierarchy between barons and knights bachelors, which has given rise to the idea that they are the origin of King James I.'s order of baronets. Selden, indeed, points out that "the old stories" often have baronetti for bannereti, and he points out that in France the title had become hereditary; but he himself is careful to say (p. 680) that banneret "hath no relation to this later title." The title of knight banneret, with the right to display the private banner, came to be granted for distinguished service in the field. "No knight banneret," says Selden, of the English custom, "can be created but in the field, and that, when either the king is present, or at least his royal standard is displayed. But the creation is almost the self-same with that in the old French

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ceremonies by the solemn delivery of a banner charged with the arms of him that is to be created, and the cutting of the end of the pennon or streamer to make it a square or into the shape of a banner in case that he which is to be created had in the field his arms on a streamer before the creation." The creation of bannerets is traceable, according to Selden, to the time of Edward I. "Under these bannerets," he adds, "divers knights bachelors and esquires usually served; and according to the number of them, the bannerets received wages." The last authentic instance of the creation of a knight banneret was that of John Smith, created banneret at the battle of Edgehill by Charles I. for rescuing the royal standard from the enemy.

See Selden, *Titles of Honor* (3rd ed., London, 1672), p. 656; Du Cange, *Glossarium* (Niort, 1883), s.v. "Bannereti."

BANNERS, FEAST OF (Jap. *Nobori-no-Sekku*), a Japanese festival in honour of male children held on the 5th of May. Every householder who has sons fastens a bamboo pole over his door and hangs from it gaily-coloured paper fishes, one for each of his boys. These fishes are made to represent carp, which are in Japanese folklore symbolical of health and longevity. The day is recognized as a national holiday.

For banners in general see Flag.

BANNISTER, CHARLES (1738-1804), English actor and singer, was born in Gloucestershire, and after some amateur and provincial experience made his first London appearance in 1762 as Will in *The Orators* at the Haymarket. Gifted with a fine bass voice, Bannister acquired a reputation as a singer at Ranelagh and elsewhere, as well as an actor, and was received with such favour that Garrick engaged him for Drury Lane. He died on the 26th of October 1804.

His son John Bannister (1760-1836), born at Deptford on the 12th of May 1760, first studied to be a painter, but soon took to the stage. His first formal appearance was at the Haymarket in 1778 as Dick in *The Apprentice*. The same year at Drury Lane he played in James Miller's version of Voltaire's *Mahomet* the part of Zaphna, which he had studied under Garrick. The Palmira of the cast was Mrs Robinson ("Perdita"). Bannister was the best low comedian of his day. As manager of Drury Lane (1802) he was no less successful. He retired in 1815 and died on the 7th of November 1836. He never gave up his taste for painting, and Gainsborough, Morland and Rowlandson were among his friends.

See Adolphus's Memoirs of John Bannister (2 vols., 1838).

BANNOCK (adapted from the Gaelic, and apparently connected with Lat. *panis*, bread), the term used in Scotland and the north of England for a large, flattish, round sort of bun or cake, usually made of barley-meal, but also of wheat, and sometimes with currants.

BANNOCK, the name of a county in the south-east of the state of Idaho, U.S.A., and of a river in the same state, which runs northward in Oneida county into the Snake or Lewis river. It is taken from that of the Bannock Indians (see Banate), a corruption of the native *Panaiti*.

BANNOCKBURN, a town of Stirlingshire, Scotland. Pop. (1901) 2444. It is situated on the "burn" from which its name is derived, the Bannock (Gaelic, *ban oc*, "white, shining stream"), a right-hand affluent of the Forth, which was once a considerable river. The town lies 2¼ m. S.S.E. of Stirling by the Caledonian railway, and now has thriving manufactures of woollens (chiefly tweeds, carpets and tartans) and leather, though at the beginning of the 19th century it was only a village. The Bore Stone, in which Bruce planted his standard before the battle in which he defeated Edward II. in 1314 (see below), is preserved by an iron grating. A mile to the west is the Gillies' Hill, now finely wooded, over which the Scots' camp-followers appeared to complete the discomfiture of the English, to which event it owes its name. Bannockburn House was Prince Charles Edward's headquarters in January 1746 before the fight at Falkirk.

The famous battle of Bannockburn (24th June 1314) was fought for the relief of Stirling Castle, which was besieged by the Scottish forces under Robert Bruce. The English governor of Stirling had promised that, if he were not relieved by that date, he would surrender the castle, and Edward II. hastily collected an army in the northern and midland counties of England. Bruce made no attempt to defend the border, and selected his defensive position on the Bannock Burn, 2½ m. S. of Stirling. His front was covered by the marshy bed of the stream, his left flank by its northerly bend towards the Forth, his right by a group of woods, behind which, until the English army appeared, the Scots concealed themselves. Two corps were left in the open in observation, one at St Ninian's to watch the lower course of the burn, one to guard the point at which the Falkirk-Stirling road crosses the burn. On the 23rd the van of the army of Edward, which numbered about 60,000 against the 40,000 of the Scots, appeared to the south of the burn and at once despatched two bodies of men towards Stirling, the first by the direct road, the other over the lower Bannock Burn near its junction with the Forth. The former was met by the Scottish outpost on the road, and here occurred the famous single combat in which Robert Bruce, though not fully armed for battle, killed Sir Henry Bohun. The English corps which took the other route was met and after a severe struggle defeated by the second Scottish outpost near St Ninian's. The English army assembled for battle on the following day. Early on St John's day the Scottish army took up its assigned positions. Three corps of pikemen in solid masses formed the first line, which was kept out of sight behind the crest until the enemy advanced in earnest. A line of "pottes" (military pits) had been previously dug to give additional protection to the front, which extended for about one mile from wing to wing. The reserve under Bruce consisted of a corps of pikemen and a squadron of 500 chosen men-at-arms under Sir Robert Keith, the marischal of

Scotland. The line of the defenders was unusually dense; Edward, in forming up on an equal front with greatly superior numbers, found his army almost hopelessly cramped. The attacking army was formed in an unwieldy mass of ten "battles," each consisting of horse and foot, and the whole formed in three lines each of three "battles," with the tenth "battle" as a reserve in rear. In this order the English moved down into the valley for a direct attack, the cavalry of each "battle" in first line, the foot in second. Ignoring the lesson of Falkirk (q.v.), the mounted men rode through the morass and up the slope, which was now crowned by the three great masses of the Scottish pikemen. The attack of the English failed to make any gap in the line of defence, many knights and men-at-arms were injured by falling into the pits, and the battle became a *mêlée*, the Scots, with better fortune than at Falkirk and Flodden, presenting always an impenetrable hedge of spears, the English, too stubborn to draw off, constantly trying in vain to break it down. So great was the press that the "battles" of the second line which followed the first were unable to reach the front and stood on the slope, powerless to take part in the battle on the crest. The advance of the third English line only made matters worse, and the sole attempt to deploy the archers was crushed with great slaughter by the charge of Keith's mounted men. Bruce threw his infantry reserve into the battle, the arrows of the English archers wounded the men-at-arms of their own side, and the remnants of the leading line were tired and disheartened when the final impetus to their rout was given by the historic charge of the "gillies," some thousands of Scottish campfollowers who suddenly emerged from the woods, blowing horns, waving such weapons as they possessed, and holding aloft improvised banners. Their cries of "slay, slay!" seemed to the wearied English to betoken the advance of a great reserve, and in a few minutes the whole English army broke and fled in disorder down the slope. Many perished in the burn, and the demoralized fugitives were hunted by the peasantry until they re-crossed the English border. One earl, forty-two barons and bannerets, two hundred knights, seven hundred esquires and probably 10,000 foot were killed in the battle and the pursuit. One earl, twenty-two barons and bannerets and sixty-eight knights fell into the hands of the victors, whose total loss of 4000 men included, it is said, only two knights.

[v.03 p.0355]

See J. E. Shearer, Fact and Fiction in the Story of Bannockburn (1909).

BANNS OF MARRIAGE (formerly bannes, from A.S. gebann, proclamation, Fr. ban, Med. Lat. bannum), the public legal notice of an impending marriage. The church in earliest days was forewarned of marriages (Tertullian, Ad Uxorem, De Pudicitia, c. 4). The first canonical enactment on the subject in the English church is that contained in the 11th canon of the synod of Westminster in London (A.D. 1200), which orders that "no marriage shall be contracted without banns thrice published in the church, unless by special authority of the bishop." It is, however, believed that the practice was in France as old as the 9th century, and certainly Odo, bishop of Paris, ordered it in 1176. Some have thought that the custom originated in the ancient rule that all "good knights and true," who elected to take part in the tournaments, should hang up their shields in the nearest church for some weeks before the opening of the lists, so that, if any "impediment" existed, they might be "warned off." By the Lateran Council of 1215 the publication of banns was made compulsory on all Christendom. In early times it was usual for the priest to betroth the pair formally in the name of the Blessed Trinity; and sometimes the banns were published at vespers, sometimes during mass. In the United Kingdom, under the canon law and by statute, banns are the normal preliminary to marriage; but a marriage may also be solemnized without the publication of banns, by obtaining a licence or a registrar's certificate. In America there is no statutory requirement; and the practice of banns (though general in the colonial period) is practically confined to the Roman Catholics.

BANNU, a town and district of British India, in the Derajat division of the North-West Frontier Province. The town (also called Edwardesabad and Dhulipnagar) lies in the north-west corner of the district, in the valley of the Kurram river. Pop. (1901) 14,300. It forms the base for all punitive expeditions to the Tochi Valley and Waziri frontier.

The district of Bannu, which only consists of the Bannu and Marwat tahsils since the constitution of the North-West Frontier Province in 1901, contains an area of 1680 sq. m. lying north of the Indus. The cis-Indus portions of Bannu and Dera Ismail Khan now comprises the new Punjab district of Mianwali. In addition to the Indus the other streams flowing through the district are the Kurram (which falls into the Indus) and its tributary the Gambila. The valley of Bannu proper, stretching to the foot of the frontier hills, forms an irregular oval, measuring 60 m. from north to south and about 40 m. from east to west. In 1901 the population was 231,485, of whom the great majority were Mahommedans. The principal tribes inhabiting the district are: (1) Waziri Pathans, recent immigrants from the hills, for the most part peaceable and good cultivators; (2) Marwats, a Pathan race, inhabiting the lower and more sandy portions of the Bannu valley; (3) Bannuchis, a mongrel Afghan tribe of bad physique and mean vices. The inhabitants of this district have always been very independent and stubbornly resisted the Afghan and Sikh predecessors of the British. After the annexation of the Punjab the valley was administered by Herbert Edwardes so thoroughly that it became a source of strength instead of weakness during the Mutiny. The inhabitants of the valley itself are now peaceful, but it is always subject to incursion from the Waziri tribes in the Tochi valley and the neighbouring hills. Salt is quarried on government account at Kalabagh and alum is largely obtained in the same neighbourhood. The chief export is wheat. A military road leads from Bannu town towards Dera Ismail Khan. The Indus, which is nowhere bridged within the district, is navigable for native boats throughout its course of 76 m. The chief frontier tribes on the border are the Waziris, Battannis and Dawaris. All these are described under their separate names.

BANSDA, a native state in the south Gujarat division of Bombay, India, belonging to the Surat agency. Area, 215 sq. m. Pop. (1901) 40,382, showing a decrease of 2% in the decade; estimated revenue £19,508. Its chief is a rajput. About half the total area of the state is cultivable, but the bulk is forested.

BANSHEE (Irish *bean sidhe*; Gaelic *ban sith*, "woman of the fairies"), a supernatural being in Irish and general Celtic folklore, whose mournful screaming, or "keening," at night is held to foretell the death of some member of the household visited. In Ireland legends of the banshee belong more particularly to certain families in whose records periodic visits from the spirit are chronicled. A like ghostly informer figures in Brittany folklore. The Irish banshee is held to be the distinction only of families of pure Milesian descent. The Welsh have the banshee under the name *gwrach y Rhibyn* (witch of Rhibyn). Sir Walter Scott mentions a belief in the banshee as existing in the highlands of Scotland (*Demonology and Witchcraft*, p. 351). A Welsh death-portent often confused with the gwrach y Rhibyn and banshee is the *cyhyraeth*, the groaning spirit.

See W. Wirt Sikes, British Goblins (1880).

BANSWARA (literally "the forest country"), a rajput feudatory state in Rajputana, India. It borders on Gujarat and is bounded on the N. by the native states of Dungarpur and Udaipur or Mewar; on the N.E. and E. by Partabgarh; on the S. by the dominions of Holkar and the state of Jabua and on the W. by the state of Rewa Kantha. Banswara state is about 45 m. in length from N. to S., and 33 m. in breadth from E. to W., and has an area of 1946 sq. m. The population in 1901 was 165,350. The Mahi is the only river in the state and great scarcity of water occurs in the dry season. The Banswara chief belongs to the family of Udaipur. During the vigour of the Delhi empire Banswara formed one of its dependencies; on its decline the state passed under the Mahrattas. Wearied out by their oppressions, its chief in 1812 petitioned for English protection, on the condition of his state becoming tributary on the expulsion of the Mahrattas. The treaty of 1818 gave effect to this arrangement, Britain guaranteeing the prince against external enemies and refractory chiefs; he, on his part, pledging himself to be guided by her representative in the administration of his state. The chief is assisted in the administration by a hamdar or minister. The estimated gross revenue is £17,000 and the tribute £2500. The custom of suttee, or widowburning, has long been abolished in the state, but the people retain all their superstitions regarding witches and sorcery; and as late as 1870, a Bhil woman, about eighty years old, was swung to death at Kushalgarh on an accusation of witchcraft. The perpetrators of the crime were sentenced to five years' rigorous imprisonment, but they had the sympathy of the people on their side. The chief town is Banswara, situated about 8 m. W. of the Mahi river, surrounded by an old disused rampart and adorned by various Hindu temples, with the battlements of the chief's palace overlooking it. Its population in 1901 was 7038. The petty state of Kushalgarh is feudatory

BANTAM, the westernmost residency of the island of Java, Dutch East Indies, bounded W. by the

Strait of Sunda, N. by the Java sea, E. by the residencies of Batavia and Preanger, and S. by the Indian Ocean. It also includes Princes Island and Dwars-in-den-weg ("right-in-the-way") Island in Sunda Strait, as well as several smaller islands along the coasts. Bantam had a population in 1897 of 709,339, including 302 Europeans, 1959 Chinese and 89 Arabs and other Asiatic foreigners. The natives are Sundanese, except in the northern or Serang division, where they are Javanese. The coast is low-lying and frequently marshy. The northern portion of the residency constitutes the most fertile portion, is generally flat with a hilly group in the middle, where the two inactive volcanoes, Karang and Pulosari, are found, while the north-western corner is occupied by the isolated Gede Mountain. The southern portion is covered by the Kendang (Malay for "range") Mountains extending into the Preanger. The rivers are only navigable at their mouths. Various geysers and cold and warm sulphur springs are found in the centre of the residency, and on a ridge of the Karang Mountain is the large crater-lake Dano, a great part of which was drained by the government in 1835 for rice cultivation. Pulse (kachang), rice and coffee are the principal products of cultivation; but in the days of government culture sugar, indigo and especially pepper were also largely grown. The former considerable fishing and coasting trade was ruined by the eruption of Krakatoa in 1883, a large stretch of coast line and the seaport towns of Charingin and Anjer being destroyed by the inundation. The prosperity of the residency was further affected by a cattle plague in 1879, followed by a fever epidemic which carried off 50,000 people, and except in the rice season there is a considerable emigration of natives. Bantam contains five native regencies or territorial divisions, namely, Serang, Anjer, Pandeglang, Charingin, Lebak. The principal towns are Serang, the capital of the residency, Chilegon, Pandeglang, Menes and Rangkas Betug. The chief town, Serang, is situated 2½ m. from Bantam Bay on the high road from Batavia. The port of Serang is Karangantu, on Bantam Bay, and close by is the old ruined town of Bantam, once the capital of the kingdom of Bantam, and before the foundation of Batavia the principal commercial port of the Dutch East India Company. The ruins include the remains of the former pepper warehouses, the old factory, called Fort Speelwijk, belonging to the company, the fortified palace of the former sultans and a wellpreserved mosque thought to have been built by the third Mahommedan ruler of Bantam about 1562-1576, and containing the tombs of various princes of Bantam. Before the Dutch conquest Bantam was a powerful Mahommedan state, whose sovereign extended his conquests in the neighbouring islands of Borneo and Sumatra. In 1595 the Dutch expelled the Portuguese and formed their first settlement. A British factory was established in 1603 and continued to exist till the staff was expelled in 1682. In 1683 the Dutch reduced the sultan to vassalage, built the fort of Speelwijk and monopolized the port, which had previously been free to all comers; and for more

than a century afterwards Bantam was one of the most important seats of commerce in the East

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Indies. In 1811 after Batavia had surrendered to the British, Bantam soon followed; but it was restored to the Dutch in 1814. Two years later, however, they removed their chief settlement to the more elevated station of Serang, or Ceram, 7 m. inland, and in 1817 the ruin of Bantam was hastened by a fire.

For "Bantam" fowls see Poultry.

BANTIN, or BANTING, the native name of the wild ox of Java, known to the Malays as sapi-utan, and in zoology as Bos (Bibos) sondaicus. The white patch on the rump distinguishes the bantin from its ally the gaur (q.v.). Bulls of the typical bantin of Java and Borneo are, when fully adult, completely black except for the white rump and legs, but the cows and young are rufous. In Burma the species is represented by the tsaine, or h'saine, in which the colour of the adult bulls is rufous fawn. Tame bantin are bred in Bali, near Java, and exported to Singapore. (See BOVIDAE.)

BANTRY, a seaport, market-town and seaside resort of Co. Cork, Ireland, in the west parliamentary division, 58 m. S.W. of Cork by the Cork, Bandon & South Coast railway, on the bay of the same name. Pop. (1901) 3109. It is an important centre both for sea fisheries and for sport with the rod. It is the terminus of the railway, and a coaching station on the famous "Prince of Wales" route (named after King Edward VII.) from Cork to Glengarriff and Killarney. The bay, with excellent anchorage, is a picturesque inlet some 22m. long by 3 to 6 broad, with 12 to 32 fathoms of water. It is one of the headquarter stations of the Channel Squadron, which uses the harbour at Castletown Bearhaven on the northern shore, behind Bear Island, near the mouth of the bay. It was the scene of attempts by the French to invade Ireland in 1689 and 1796, and troops of William of Orange were landed here in 1697. There are several islands, the principal of which are Bear Island and Whiddy, off the town. Ruins of the so-called "fish palaces" testify to the failure of the pilchard fishery in the 18th century.

BANTU LANGUAGES. The greater part of Africa south of the equator possesses but one linguistic family so far as its native inhabitants are concerned. This clearly-marked division of human speech has been entitled the Bantu, a name invented by Dr W. H. I. Bleek, and it is, on the whole, the fittest general term with which to designate the most remarkable group of African languages.[1]

It must not be supposed for a moment that all the people who speak Bantu languages belong necessarily to a special and definite type of negro. On the contrary, though there is a certain physical resemblance among those tribes who speak clearly-marked Bantu dialects (the Babangi of the upper Congo, the people of the Great Lakes, the Ova-herero, the Ba-tonga, Zulu-Kaffirs, Awemba and some of the East Coast tribes), there is nevertheless a great diversity in outward appearance, shape of head and other physical characteristics, among the negroes who inhabit Bantu Africa. Some tribes speaking Bantu languages are dwarfs or dwarfish, and belong to the group of Forest Pygmies. Others betray relationship to the Hottentots; others again cannot be distinguished from the most exaggerated types of the black West African negro. Yet others again, especially on the north, are of Gala (Galla) or Nilotic origin. But the general deduction to be drawn from a study of the Bantu languages, as they exist at the present day, is that at some period not more than 3000 years ago a powerful tribe of negroes speaking the Bantu motherlanguage, allied physically to the negroes of the south-western Nile and southern Lake Chad basins (yet impregnated with the Caucasian Hamite), pushed themselves forcibly from the very heart of Africa (the region between the watersheds of the Shari, Congo and western Nile) into the southern half of the continent, which at that time was probably sparsely populated except in the north-west, east and south. The Congo basin and the south-western watershed of the Nile at the time of the Bantu invasion would have been occupied on the Atlantic seaboard by West Coast negroes, and in the centre by negroes of a low type and by Forest Pygmies; the eastern coasts of Victoria Nyanza and the East African coast region down to opposite Zanzibar probably had a population partly Nilotic-negro and partly Hottentot-Bushman. From Lakes Tanganyika and Nyasa south-westwards to the Cape of Good Hope the population was Forest-negro, Niloticnegro, Hottentot and Bushman. Over nearly all this area the Bantu swept; and they assimilated or absorbed the vast majority of the preceding populations, of which, physically or linguistically, the only survivors are the scattered tribes of pygmies in the forests of south-west Nile land, Congo basin and Gabun, the central Sudanese of the N.E. Congo, a few patches of quasi-Hottentot, Hamitic and Nilotic peoples between Victoria Nyanza and the Zanzibar coast, and the Bushmen and Hottentots of south-west Africa. The first area of decided concentration on the part of the Bantu was very probably Uganda and the shores of Tanganyika. The main line of advance southwest trended rather to the east coast of Africa than to the west, but bifurcated at the south end of Lake Tanganyika, one great branch passing west between that lake and Nyasa, and the other [v.03 p.0357] southwards. Finally, when the Bantu had reached the south-west corner of Africa, their farther advance was checked by two causes: first, the concentration in a healthy, cattle-rearing part of Africa of the Hottentots (themselves only a superior type of Bushman, but able to offer a much sturdier resistance to the big black Bantu negroes than the crafty but feeble Bushmen), and secondly, the arrival on the scene of the Dutch and British, but for whose final intervention the whole of southern Africa would have been rapidly Bantuized, as far as the imposition of language was concerned.

The theory thus set forth of the origin and progress of the Bantu and the approximate date at which their great southern exodus commenced, is to some extent attributable to the present writer only, and has been traversed at different times by other writers on the same subject. In the nearly total absence of any historical records, the only means of building up Bantu history lies in linguistic research, in the study of existing dialects, of their relative degree of purity, of their connexion one with the other and of the most widely-spread roots common to the majority of the Bantu languages. The present writer, relying on linguistic evidence, fixed the approximate date at which the Bantu negroes left their primal home in the very heart of Africa at not much more than 2000 years ago; and the reason adduced was worth some consideration. It lay in the root common to a large proportion of the Bantu languages expressing the domestic fowl-kuku (nkuku, ngoko, nsusu, nguku, nku). Now the domestic fowl reached Africa first through Egypt, at the time of the Persian occupation—not before 500 to 400 B.C. It would take at that time at least a couple of hundred years before—from people to people and tribe to tribe up the Nile valley—the fowl, as a domestic bird, reached the equatorial regions of Africa. The Muscovy duck, introduced by the Portuguese from Brazil at the beginning of the 17th century, is spreading itself over Negro Africa at just about the same rate. Yet the Bantu people must have had the domestic fowl well established amongst themselves before they left their original home, because throughout Bantu Africa (with rare exceptions and those not among the purest Bantu tribes) the root expressing the domestic fowl recurs to the one vocable of *kuku*.^[2] Curiously enough this root *kuku* resembles to a marked degree several of the Persian words for "fowl," and is no doubt remotely derived from the cry of the bird. Among those Negro races which do not speak Bantu languages, though they may be living in the closest proximity to the Bantu, the name for fowl is quite different. [3] The fowl was only introduced into Madagascar, as far as researches go, by the Arabs during the historical period, and is not known by any name similar to the root kuku. Moreover, even if the fowl had been (and there is no record of this fact) introduced from Madagascar on to the east coast of Africa, it would be indeed strange if it carried with it to Cameroon, to the White Nile and to Lake Ngami one and the same name. It may, however, be argued that such a thing is possible, that the introduction of the fowl south of the equator need not be in any way coincident with the Bantu invasion, as its name in North Central Africa may have followed it everywhere among the Bantu peoples. But all other cases of introduced plants or animals do not support this idea in the least. The Muscovy duck, for instance, is pretty well distributed throughout Bantu Africa, but it has no common widely-spread name. Even tobacco (though the root "taba" turns up unexpectedly in remote parts of Africa) assumes totally different designations in different Bantu tribes. The Bantu, moreover, remained faithful to a great number of roots like "fowl," which referred to animals, plants, implements and abstract concepts known to them in their original home. Thus there are the root-words for ox (-ñombe, -ombe, -nte), goat (-budi, -buzi, -buzi), pig (-guluba), pigeon (-jiba), buffalo (nyati), dog (mbwa), hippopotamus (-bugu, gubu), elephant (-jobo, -joko), leopard (ngwi), house (-zo, -do, -yumba, -anda, -dago, -dabo), moon (-ezi), sun, sky, or God (-juba), water (-ndi, -ndiba, mandiba), lake or river (-anza), [4] drum (ngoma), name (-ina or jina), wizard (nganga), belly, bowel (-vu, -vumo), buttocks (-tako); adjectives like -bi (bad), -eru (white); the numerals, 2, 3, 4, 5, 10 and 100; verbs like fwa (to die), ta (to strike, kill), la (da) or lia (di, dia) (to eat). The root-words cited are not a hundredth part of the total number of root-words which are practically common to all the spoken dialects of Bantu Africa. Therefore the possession amongst its root-words of a common name for "fowl" seems to the present writer to show conclusively that (1) the original Bantu tribe must have possessed the domestic fowl before its dispersal through the southern half of Africa began, and that (2) as it is historically certain that the fowl as a domestic bird did not reach Egypt before the Persian conquest in 525 B.C., and probably would not have been transmitted to the heart of Africa for another couple of hundred years, the Bantu exodus (at any rate to the south of the equatorial region) may safely be placed at a date not much anterior to 2100 years ago.

The creation of the Bantu type of language (pronominal-prefix) was certainly a much more ancient event than the exodus from the Bantu mother-land. Some form of speech like Fula, Kiama (Tern), or Kposo of northern Togoland, or one of the languages of the lower Niger or Benue, may have been taken up by ancient Libyan, Hamite or Nilotic conquerors and cast into the type which we now know as Bantu,—a division of sexless Negro speech, however, that shows no obvious traces of Hamitic (Caucasian) influence. We have no clue at present to the exact birth-place of the Bantu nor to the particular group of dialects or languages from which it sprang. Its origin and near relationships are as much a puzzle as is the case with the Aryan speech. Perhaps in grammatical construction (suffixes taking the place of prefixes) Fula shows some resemblance; and Fula possesses the concord in a form considerably like that of the Bantu, as well as offering affinities in the numerals 3 and 4, and in a few nominal, pronominal and verbal roots. The Timne and cognate languages of Sierra Leone and the north Guinea coast use pronominal prefixes and a system of concord, the employment of the latter being precisely similar to the same practice in the Bantu languages; but in word-roots (substantives, numerals, pronouns, verbs) there is absolutely no resemblance with this north Guinea group of prefix-using languages. In the numerals 2, 3, 4, and sometimes 5, and in a few verbal roots, there is a distinct affinity between Bantu and the languages of N. Togoland, the Benue river, lower Niger, Calabar and Gold Coast. The same thing may be said with less emphasis about the Madi and possibly the Nyam-Nyam (Makarka) group of languages in Central Africa though in none of these forms of speech is there any trace of the concord. Prefixes of a simple kind are used in the tongues of Ashanti, N. Togoland, lower Niger and eastern Niger delta, Cross River and Benue, to express differences between singular and plural, and also the quality of the noun; but they do not correspond to those of the Bantu type, though they sometimes fall into "classes." In the north-west of the Bantu field, in the region between Cameroon and the north-western basin of the Congo, the Cross river and the Benue, there is an area of great extent occupied by languages of a "semi-Bantu" character, such as Nki, Mbudikum, Akpa, Mbe, Bayoñ, Manyañ, Bafut and Banshō, and the Munshi, Jaráwa, Kororofa, Kamuku and Gbari of the central and western Benue basin. The resemblances to the

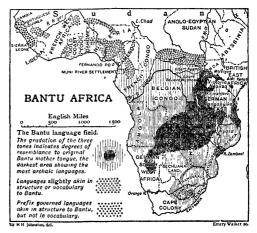
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Bantu in certain word-roots are of an obvious nature; and prefixes in a very simple form are generally used for singular and plural, but the rest of the concord is very doubtful. Here, however, we have the nearest relations of the Bantu, so far as etymology of word-roots is concerned. Further evidence of slight etymological and even grammatical relationships may be traced as far west as the lower Niger and northern and western Gold Coast languages (and, in some word-roots, the Mandingo group). The Fula language would offer some *grammatical* resemblance if its suffixes were turned into prefixes (a change which has actually taken place in the reverse direction in the English language between its former Teutonic and its modern Romanized conditions; *cf.* "offset" and "set-off," "upstanding" and "standing-up").

The legends and traditions of the Bantu peoples themselves invariably point to a northern origin, and a period, not wholly removed from their racial remembrance, when they were strangers in their present lands. Seemingly the Bantu, somewhat early in their migration down the east coast, took to the sea, and not merely occupied the islands of Pemba and Zanzibar, but travelled as far afield as the Comoro archipelago and even the west coast of Madagascar. Their invasion of Madagascar must have been fairly considerable in numbers, and they doubtless gave rise to the race of black people known traditionally to the Hovas as the Va-zimba.

The accompanying map will show pretty accurately the distribution of the Bantu-speaking Negroes at the present day.

It will be seen by a glance at this map that the areas in which are spoken Bantu languages of typical structure and archaic form are somewhat widely spread. Perhaps on the whole the most archaic dialects at the present day are those of Mount Elgon, Ruwenzori, Unyoro, Uganda, the north coast of Tanganyika and of the Bemba country to the south-west of Tanganyika; also those in the vicinity of Lake Bangweulu, and the Nkonde and Kese dialects of the north and north-east coasts of Lake Nyasa; also (markedly) the Subiya speech of the western Zambezi. Another language containing a good many original Bantu roots and typical features is the well-known Oci-herero of Damaraland (though this S.W. African group also presents marked peculiarities and some strange divergencies). Kimakonde, on the east coast of Africa, is a primitive Bantu tongue; so in its roots, but not in



its prefixes, is the celebrated Ki-swahili of Zanzibar. Ci-bodzo of the Zambezi delta is also an archaic type of great interest. The Zulu-Kaffir language, though it exhibits marked changes and deviations in vocabulary and phonetics (both probably of recent date), preserves a few characteristics of the hypothetical mother-tongue: so much so that, until the languages of the Great Lakes came to be known, Zulu-Kaffir was regarded as the most archaic type of Bantu speech, a position from which it is now completely deposed. It is in some features unusually divergent from the typical Bantu.

Classification.—With our present knowledge of the existing Bantu tongues and their affinities, it is possible to divide them approximately into the following numbered groups and subdivisions, commencing at the north-eastern extremity of the Bantu domain, where, on the whole, the languages approximate nearest to the hypothetical parent speech.

- (1) The Uganda-Unyoro group. This includes all the dialects between the Victoria Nile and Busoga on the east and north, the east coast of Lake Albert, the range of Ruwenzori and the Congo Forest on the west; on the south-east and south, the south coast of the Victoria Nyanza, and a line from near Emin Pasha Gulf to the Malagarazi river and the east coast of Tanganyika. On the south-west this district is bounded more or less by the Rusizi river down to Tanganyika. It includes the district of Busoga on the north-east and all the archipelagoes and inhabited islands of the Victoria Nyanza even as far east as Bukerebe, except those islands near the north-east coast. The dialects of Busoga, the Sese Islands and the west coast of Lake Victoria are closely related to the language of the kingdom of Uganda. Allied to, yet quite distinct from the Uganda subjection, is that which is usually classified as *Unvoro*. [5] This includes the dialects spoken by the Hima (Hamitic aristocracy of these equatorial lands—Uru-hima, Ru-hinda, &c.), Ru-songora, Ru-iro, Ru-toro, Ru-tusi, and all the kindred dialects of Karagwe, Busiba, Ruanda, Businja and Bukerebe. Ki-rundi, of the Burundi country at the north end of Tanganyika, and the other languages of eastern Tanganyika down to Ufipa are closely allied to the Unyoro sub-section of group 1, but perhaps adhere more closely to group 12. The third independent sub-section of this group is Lu-konjo, the language which is spoken on the southern flanks of the Ruwenzori Range and thence southwards to Lake Kivu and the eastern limits of the Congo Forest.
- (2) The second group on the geographical list is *Lihuku-Kuamba*, the separate and somewhat peculiar Bantu dialects lingering in the lands to the south and south-west of Albert Nyanza (Mboga country). Lihuku (or Libvanuma) is a very isolated type of Bantu, quite apart from the Uganda-Unyoro groups, with which it shows no special affinity at all, though in close juxtaposition. Its alliance with *Kuamba* of western Ruwenzori is not very close. Other affinities are with the degraded Bantu dialects (*Ki-bira*, &c.) of the Ituri-Aruwimi forests. Kuamba is spoken on the west and north slopes of Ruwenzori. Both Kuamba and Lihuku show a marked relationship with the languages on the northern Congo and Aruwimi, less in grammar than in

vocabulary.

- (3) The *Kavirondo-Masaba* section. This group, which includes the *Lu-nyara*, *Luwanga*, *Lukonde* and *Igizii* of the north-east and eastern shores of the Victoria Nyanza and the northern Kavirondo and Mount Elgon territories, is related to the Luganda section more than to any group of the Bantu tongues, but it is a very distinct division, in its prefixes the most archaic. It includes the languages spoken along the western flanks of Mount Elgon, those of Bantu Kavirondo, and of the eastern coast-lands of the Victoria Nyanza (Igizii).
- (4) The *Kikuyu-Kamba* group of British East Africa, east of the Rift valley. It includes, besides the special dialects of Kikuyu and Ukambani, all the scattered fragments of Bantu speech on Mount Kenya and the upper Tana river (*Dhaicho*).
- (5) The *Kilimanjaro* (*Chaga-Siha*) group, embracing the rather peculiar dialects of Mount Kilimanjaro, Mount Meru and Ugweno.
- (6) The *Pokomo-Nyika-Giriama-Taveita* group represents the Bantu dialects of the coast province of British East Africa, between (and including) the Tana river on the north and the frontier of German East Africa on the south.
- (7) Swahili, the language of Zanzibar and of the opposite coast, a form of speech now widely spread as a commercial language over Eastern and Central Africa. Swahili is a somewhat archaic Bantu dialect, indigenous probably to the East African coast south of the Ruvu (Pangani) river, which by intermixture with Arabic has become the lingua franca of eastern Africa between the White Nile and the Zambezi. It was almost certainly of mainland origin, distinct from the original local dialects of Zanzibar and Pemba, which may have belonged to group No. 6. There are colonies of Swahili-speaking people at Mombasa, Malindi, Lamu, and even as far north as the Shebeli river in Somaliland, also along the coast of German and Portuguese East Africa as far south as Angoche. In the coast-lands between the Ruvu or Pangani river on the north and the Kilwa settlements on the south, the local languages and dialects are more or less related to Swahili, though they are independent languages. Amongst these may be mentioned Bondei, Shambala (north of the Ruvu), Nguru, Zeguha, Ki-mrima and Ki-zaramo.
- (8) This group might be described as *Kaguru-Sagala-Kami*. It is one which occupies the inland territories of German East Africa, between the Swahili coast dialects on the east and the domain of the Nyamwezi (No. 11) on the west. On the north this group is bounded by the non-Bantu languages of the Masai, Mbugu and Taturu, and on the south by the Ruaha river. This group includes *Kigogo* and *Irangi*.

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- (9) The dialects of the Comoro Islands, between the East African coast and Madagascar, are styled *Hi-nzua* or *Anzuani* and *Shi-ngazija*. They are somewhat closely related to Swahili.
- (10) The archaic *Makonde* or *Mabiha* of the lower Ruvuma, and the coast between Lindi and Ibo; this might conceivably be attached to the Swahili branch.
- (11) The *Nyamwezi* group includes all the dialects of the Nyamwezi country west of Ugogo as far north as the Victoria Nyanza (where the tongues melt into group No. 1), and bounded on the south by the Upper Ruaha river, and on the west by the eastern borderlands of Tanganyika. The Nyamwezi genus penetrates south-west to within a short distance of Lake Rukwa. A language of this group was at one time a good deal spoken in the southern part of the Belgian Congo, having been imported there by traders who made themselves chiefs.
- (12) The *Tanganyika* languages (*Ki-rega, Kabwari, Kiguha*, &c). These dialects are chiefly spoken in the regions west-north-west, and perhaps north and east of Tanganyika, from the vicinity of Lake Albert Edward on the north and the Lukuga outlet of Tanganyika on the south. On the west they are bounded by the Congo Forest and the Manyema genus (No. 13). The languages on the east coast of Tanganyika (*Ki-rundi, Kigeye*, &c.) seem to be more nearly connected with those of group No. 1 (*Uganda-Unyoro*), yet perhaps they are more conveniently included here.
- (13) The *Manyema* (*Baenya*) group includes most of the corrupt Bantu dialects between the western watershed of Tanganyika and the main stream of the Luapula-Congo, extending also still farther north, and comprising (seemingly) the languages of the Aruwimi basin, such as *Yalulema*, *Soko*, *Lokele*, *Kusu*, *Tu-rumbu*, &c. On the west the Manyema group is bounded by the languages of the Lomami valley, which belong to groups Nos. 15 and 16; on the east the Manyema genus merges into the much purer Bantu dialects of groups Nos. 1 and 12. An examination of the Lihuku-Kuamba section (No. 2) shows these tongues to be connected with the Manyema group. The *Kibira* dialects of the north-eastern Congo Forest (Ituri district) may perhaps be placed in this section. [6]
- (14) The *Rua-Luba-Lunda-Marungu* group (in which are included *Kanyoka, Lulua* and *Ki-tabwa*) occupies a good deal of the south central basin of the Congo, between the south-west coast-line of Tanganyika on the east and the main streams of the Kasai and Kwango on the west, between the Bakuba country on the north and the Zambezi watershed on the south.
- (15) The *Bakuba* assemblage of Central Congo dialects (*Songe, Shilange, Babuma,* &c.) probably includes all the Bantu languages between the Lomami river on the east and the Kwa-Kasai and Upper Kwilu on the west. Its boundary on the north is perhaps the Sankuru river.
- (16) The *Balolo* group consists of all the languages of the Northern Congo bend (bounded on the north, east and west by the main stream of the Congo), and perhaps the corrupt dialects of the

Northern Kasai, Kwilu and Kwango (Babuma, Bahuana, Bambala, Ba-yaka, Bakutu, &c.), where these are not nearer allied to Teke (No. 18) or to Bakuba.

- (17) The *Bangala-Bobangi-Liboko* group comprises the commercial languages of the Upper Congo (*Ngala, Bangi, Liboko, Poto, Ngombe, Yanzi,* &c.) and all the known Congo dialects along and to the north and sometimes south of the main stream, from as far west as the junction of the Sanga to as far east as the Rubi and Lomami rivers, and those between the Congo and the Lower Ubangi river and up the Ubangi, as far north as the limits of the Bantu domain (about 3° 30′ N.). Allied to these perhaps are the scarcely-known forms of speech in the basin of the Sanga river, besides the "Ba-yanzi" dialects of Lakes Mantumba and Leopold II.
- (18) The *Bateke (Batio)* group. This may be taken roughly to include most of the Bantu dialects west of the Sanga river, northwest of the Lower Congo, south of the Upper Ogowe and Ngoko rivers and east of the Atlantic coast-lands.
- (19) The $\it Di-Kele$ and $\it Benga$ dialects of Spanish Guinea and the Batanga coast of German Cameroon.
- (20) The $Fa\~n$ or Pangwe forms of speech (so corrupt as to be only just recognizable as Bantu), which occupy the little-known interior of German Cameroon and French Gabun, down to the Ogowe, and as far east and north as the Sa $\~n$ ga, Sanagá and Mbam rivers, and the immediate hinterland of the "Duala" Cameroon.
- (21) The *Duala* group, which on the other hand is of a much purer Bantu type, includes the languages spoken on the estuary and delta of the Cameroon river.
- (22) The *Isubu-Bakwiri* group of the coast-lands north of Cameroon delta (Ambas Bay), and on the west slopes of Cameroon Mts.
- (23) The Bantu dialects of *Fernando Pô* (*Ediya, Bateti, Bani,* &c.) distantly allied to Nos 24, 2 and 13.
- (24) The *Barondo-Bakundu* group, which begins on the north at the Rio del Rey on the extremity of the Bantu field, near the estuary of the Cross river. This group may also include *Barombi* and *Basā, Boñkeñ, Abo, Nkosi* and other much-debased dialects, which are spoken on the eastern slopes of the Cameroon mountains and on the Cameroon river (Magombe), and thence to the Sanagá and Nyong rivers. Eastwards and north-eastwards of this group, the languages (such as *Mbe, Bati, Nki, Mbudikum, Bafut, Bayoñ*) may be described as "semi-Bantu," and evincing affinities with the forms of speech in the basin of the Central Benue river and also with the *Fañ* (No. 20).
- (25) Turning southwards again from the north-westernmost limit of the Bantu, we meet with another group, the *Mpongwe-Orungu* and *Aduma* languages of French Gabun, and the tongues of the Lower Ogowe and Fernan Vaz promontory.
- (26) These again shade on the south into the group of *Kakongo* dialects of the Loango and Sete Kama coast—such as *Ba-kama, Ba-nyanga, Ma-yombe, Ba-vili, Ba-kamba* and *Ka-kongo* (*Kabinda*).
- (27) The *Kongo* language group comprises the dialects along the lower course of the Congo from its mouth to Stanley Pool; also the territory of the old kingdom of Congo, lying to the south of that river (and north of the river Loje) from the coast eastwards to the watershed of the river Kwango (and the longitude, more or less, of Stanley Pool).
- (28) In the south the Kongo dialects melt imperceptibly into the closely-allied Angola language. This group may be styled in a general way *Mbundu*, and it includes the languages of Central Angola, such as *Ki-mbundu*, *Mbamba*, *Ki-sama*, *Songo*, *U-mbangala*. The boundary of this genus on the east is probably the Kwango river, beyond which the Lunda languages begin (No. 14). On the north, the river Loje to some extent serves as a frontier between the *Kongo* and *Mbundu* tongues. On the south the boundary of group No. 28 is approximately the 11th degree of south latitude.
- (29) Very distinct from the *Ki-mbundu* speech (though with connecting forms) is the *Oci-herero* group, which includes the *Herero* language of Damaraland, the *Umbundu* of the Bihe highlands of south Angola, the *Nano* of the Benguela coast, and *Si-ndonga*, *Ku-anyama* and *Oci-mbo* of the southern regions of Portuguese Angola and the northern half of German South-West Africa. The languages of group No. 29 probably extend as far inland as the Kwito and Kubango rivers, in short, to the Zambezi watershed. On the south they are confronted with the Hottentot languages. The Haukoin or Hill Damaras—a Negro race of unexplained affinities and apparently speaking a Hottentot language—occupy an enclave in the area of *Herero* speech.
- (30) What may be called the *Kiboko* or *Kibokwe* (also *Kioko*) family of eastern Angola is a language-group which seems to offer affinities to the languages of the Upper Zambezi and to those of groups Nos. 28 and 29. It extends eastwards into the south-western portion of the Belgian Congo, and includes the *Lubale* of northern Barotseland and the sources of the river Zambezi, and possibly the *Gangela* of south-western Angola.
- (31) Southwards of group No. 30 is that of the *Barotseland* languages, of which the best-known form—almost the only one that is effectively illustrated—is *Si-luyi*. To *Si-luyi* may be related the *Mabunda* of Western Barotseland. The dialects of the *Ambwela*, *A-mbwe*, *Ma-bukushu* and *A-kwamashi* are probably closely related.

- (32) Next is a group which might be styled the *Subiya-Tonga-Ila*, though some authorities think that *Tonga* and *Ila* deserve to be ranked as an independent group. There is, however, a close alliance in structure between the languages of each of the two subsections. The *Tonga* subgroup would include the dialects of the *Ba-tetela*, the *Ba-ila* (*Mashukulumbwe*) and of all Central Zambezia. *Ci-subiya* is the dominant language of South-West Zambezia, along a portion of the Zambezi river south of Barotseland, and in the lands lying between the Zambezi and the Chobe-Linyante river. *Subiya* is one of the most archaic of Bantu languages, more so than *Tonga*. Both are without any strong affinity to *Oci-herero*, and only evince a *slight* relationship with the Zulu group (No. 44).
- (33) The *Bisa* or *Wisa* family includes the languages of Iramba, Bausi, Lukinga, in the southernmost projection of the Belgian Congo, and the dialects of *Lubisa* and *Ilala* between the Chambezi river and Lake Bangweulu on the north, and the Luangwa river on the east and south; perhaps also some of the languages along the course of the Upper Luapula river.
- (34) With it is closely allied that of the *Bemba* or *Emba* dialects. This interesting genus occupies the ground between the south-west and south coasts of Tanganyika, Lake Mweru, and the Upper Chambezi river. The *Ki-bemba* domain may be taken to include the locally-modified *Ki-lungu* and *Ki-mambwe* of South and South-East Tanganyika.
- (35) What may be called the *North Nyasa* or *Nkonde* group comprises all the dialects of the north-west and north coasts of Lake Nyasa (such as *Ici-wandia* and *Iki-nyikiusa*) and *Ishi-nyi*\(\tilde{a}\) of the Nyasa-Tanganyika plateau, and extends perhaps as far north west as the Fipa country (*Iki-fipa*), and the shores of Lake Rukwa (*Ici-wungu*) in the vicinity of the Nyamwezi domain (No. 11). *Iki-fipa*, however, has some affinities to the Tanganyika and western Victoria-Nyanza languages (groups Nos. 1 and 12).

[v.03 p.0360]

- (36) The western part of Nyasaland, south of group No. 35, is occupied by the *Tumbuka* section, which includes the languages of the *Tumbuka*, *Henga* and *A-tonga* peoples, and occupies the area between the western shores of Lake Nyasa and the Upper Luangwa river.
- (37) Eastwards of No. 35 (North Nyasa group) lies the *Kinga* speech of the lofty Livingstone mountains, which is sufficiently distinct from its neighbours to be classified as a separate group.
- (38) East of the Livingstone mountains and west of the Ruaha river, south also of the Unyamwezi domain, extends the *Sango-Bena-Hehe-Sutu* group.
- (39) The extensive *Yao* genus of languages stretches from just behind the coast of the Lindi settlements in German East Africa (*Ki-mwera*) south-westward across the Ruvuma river to the north-east shores of Lake Nyasa (*Ki-kese*), and thence back to the valley of the Lujenda-Ruvuma (*Cingindo*), and southwards in various dialects of the *Yao* language to the south-east corner of Lake Nyasa and the region east of the Shire river, between Lake Nyasa, the Shire highlands and Mt. Mlanje. It is only since the middle of the 19th century that the *Yao* language has conquered territory to the south of Lake Nyasa. There still remain within its domain colonies of Nyanja-speaking people.
- (40) Eastwards of the *Yao* domain, and bounded on the north by the range of that language in the Ruvuma valley and by the separate group of *Ki-makonde* (No. 10), ranges the well-marked *Makua* genus. The languages thus described occupy the greater part of Portuguese East Africa away from the watershed of Lake Nyasa. The *Makua* language is probably divided into the following dialects:—*I-medo, I-lomwe, I-tugulu* and *Anguru*. There are other dialects unnamed in the Angoji coast-region, where, however, strong colonies of Swahili-speaking people are settled. The southern part of the *Makua* domain is occupied by the *Ci-cuambo* of the Quelimane district.
- (41) Nyanja, perhaps the most extensive group of cognate languages in the Bantu field, is principally associated with the east and west shores of the southern half of Lake Nyasa. It also covers all the valley of the Shire, except portions of the Shire highlands, down to the junction of that stream with the Zambezi, and further, the lands on both banks of the Zambezi down to and including its delta. West of Lake Nyasa, the Nyanja domain extends in the Senga language to the river Luangwa and the Central Zambezi, also along both banks of the Central Zambezi. South of the Central Zambezi, Nyanja dialects are spoken as far west as the Victoria Falls. Thence they extend eastwards over Mashonaland to the sea-coast. With this family may also be associated the languages of the Portuguese coast-region south of the Zambezi as far as Inhambane. The principal dialects of the Nyanja language are the Cinyanja of Eastern Nyasaland, Ci-peta and Cimaravi of South-West Nyasaland to as far as the watershed of the Luangwa river, the Ci-mañanja of the Shire highlands, Ci-mobo and Ci-machinjiri of the Shire valley, Ci-sena or Ci-nyungwe of Tete and Sena (Zambezi), and Ci-mazaro of the Lower Zambezi. The Luangwa regions, as already mentioned, are occupied by the distinct but closely-allied Senga language. South of the Central Zambezi there are Ci-nanzwa in the region near the Victoria Falls, Ci-nyai, Shi-kalaña, Ci-shuna (Ci-gomo), Ci-loze, and possibly Ci-shangwe (or Ci-hlangane) and Shi-lenge which link on to the Beira coast dialects. In the delta of the Zambezi is to be found Ci-podzo, a very distinct language, yet one which belongs to the Nyanja genus. Ci-shangane, Chopi or Shi-lenge and other dialects of the Beira and Inhambane coast-lands and of Manika have been much influenced by Zulu dialects (Tebele and Ronga).
- (42) The well-marked *Bechuana* language group has very distinct features of its own. This includes all the Bantu dialects of the Bechuanaland protectorate west of the Guai river. Bechuana dialects (such as *Ci-venda, Se-suto, Se-peli, Se-roloñ, Se-* χ *lapi,* &c.) cover a good deal of the north

and west of the Transvaal, and extend over all the Orange River Colony and Bechuanaland. *Sesuto* is the language of Basutoland; *Se-rolon, Se-mangwato*, of the Eastern Kalahri; *Se-kololo* is the court language of Barotseland; *Ci-venda* and *Se-pedi* or *Peli* are the principal dialects of the Transvaal. Group No. 42, in fact, stretches between the Zambezi on the north and the Orange river on the south, and extends westward (except for Hottentot and Bushmen interruptions) to the domain of the *Oci-herero*.

- (43) The Ronga (Tonga) languages of Portuguese South-East Africa (Gazaland, Lower Limpopo valley, and patches of the North Transvaal (Shi-gwamba), Delagoa Bay) are almost equally related to the Nyanja group (41) on the one hand, and to Zulu on the other, probably representing a mingling of the two influences, of which the latter predominates.
- (44) Lastly comes the *Zulu-Kaffir* group, occupying parts of Rhodesia, the eastern portion of the Transvaal, Swaziland, Natal and the eastern half of Cape Colony. In vocabulary, and to some degree in phonetics, the Zulu language (divided at most into three dialects) is related in some phonetic features to No. 42, and of course to No. 43; otherwise it stands very much alone in its developments. It may have distant relations in groups Nos. 29 and 32. Dialects of Zulu (*Tebele* and *Ki-ngoni* or *Ci-nongi*) are spoken at the present day in South-West Rhodesia and in Western Nyasaland and on the plateaus north-east of Lake Nyasa, carried thither by the Zulu raiders of the early 19th century.

The foregoing is only an attempt to classify the known forms of Bantu speech and to give their approximate geographical limits. The writer is well aware that here and there exist small patches of languages spoken by two or three villages which, though emphatically Bantu, possess isolated characters making them not easily included within any of the above-mentioned groups; but too detailed a reference to these languages would be wearisome and perhaps puzzling. Broadly speaking, the domain of Bantu speech seems to be divided into four great sections:—(a) the languages of the Great Lakes and the East Coast down to and including the Zambezi basin; (b) the South-Central group (Bechuana-Zulu); (c) the languages of the South-West, from the southern part of the Belgian Congo to Damaraland and the Angola-Congo coast; and (d) the Western group, including all the Central and Northern Congo and Cameroon languages, and probably also group No. 2 of the Albert Nyanza and Semliki river.

Common Features.—There is no mistaking a Bantu language, which perhaps is what renders the study of this group so interesting and encouraging. The homogeneity of this family is so striking, as compared with the inexplicable confusion of tongues which reigns in Africa north of the Bantu borderland, that the close relationships of these dialects have perhaps been a little exaggerated by earlier writers.

The phonology of the Western group (d) is akin to that of the Negro languages of Western and West-Central Africa. A small portion of (b) the South-Central group (Zulu) has picked up clicks, perhaps borrowed from the Hottentots and Bushmen. Otherwise, the three groups (a), (b) and (c) are closely related in phonology, and never, except here and there on the borders of the Western group, adopt the peculiar West African combinations of kp and gb, which are so characteristic of African speech between the Upper Nile and the Guinea coast.

The following propositions may be laid down to define the special or peculiar features of the Bantu languages:—

- (1) They are agglutinative in their construction, the syntax being formed by adding prefixes principally and also suffixes to the root, but no infixes (that is to say, no mutable syllable incorporated into the middle of the root-word).^[7] (2) The root excepting its terminal vowel is practically unchanging, though its first or penultimate vowel or consonant may be modified in pronunciation by the preceding prefix, or the last vowel in the same way by the succeeding suffix.
- (3) The vowels of the Bantu languages are always of the Italian type, and no true Bantu language includes obscure sounds like \ddot{o} and \ddot{u} . Each word must end in a vowel (though in some modern dialects in Eastern Equatorial, West and South Africa the terminal vowel may be elided in rapid pronunciation, or be dropped, or absorbed in the terminal consonant, generally a nasal). No two consonants can come together without an intervening vowel, except in the case of a nasal, labial or sibilant. [8] No consonant is doubled. Apparent exceptions occur to this last rule where two nasals, two r's or two d's come together through the elision of a vowel or a labial.
- (4) Substantives are divided into classes or genders, indicated by the pronominal particle prefixed to the root. These prefixes are used either in a singular or in a plural sense. With the exception of the "abstract" prefix Bu (No. 14), no singular prefix can be used as a plural nor vice versa. There is a certain degree of correspondence between the singular and plural prefixes (thus No. 2 prefix serves almost invariably as a plural to No. 3; No. 8 corresponds as a plural to No. 7). The number of prefixes common to the whole group is perhaps sixteen. The pronominal particle or prefix of the noun is attached as a prefix to the roots of the adjectives, pronouns, prepositions and verbs of the sentence which are connected with the governing noun; and though in course of time these particles may differ in form from the prefix of the substantive, they were akin in origin. (This system is the "concord" of Dr Bleek. [9]) The pronominal particles, whether in nominative or accusative case, must always precede the nominal, pronominal, adjectival and verbal roots, though they often follow the auxiliary prefix-participles used in conjugating verbs, [10] and the roots of some prepositions.

- (5) The root of the verb is the second person singular of the imperative.
- (6) No sexual gender is recognized in the pronouns and concord. Sexual gender may be indicated by a male "prefix" of varying form, often identical with a word meaning "father," while there is a feminine prefix, na or nya, connected with the root meaning "mother," or a suffix ka or kazi, indicating "wife," "female." The 1st and 2nd prefixes invariably indicate living beings and are Usually restricted to humanity.

The sixteen original prefixes of the Bantu languages are given below in the most archaic forms to be found at the present day. The still older types of these prefixes met with in one or two languages, and deduced generally by the other forms of the particle used in the syntax, are given in brackets. It is possible that some of these prefixes resulted from the combination of a demonstrative pronoun and a prefix indicating quality or number.

Old Bantu Prefixes.

Singular. Plural. Class 1. Umu- ($\tilde{N}qu$ -mu-). [11] Class 2. Aba (Mba-ba or $\tilde{N}qa$ -ba). [11] 3. *Umu-* (*Ñgu-mu-*). 4. *Imi-* (Ñgi-mi-). 5. *Idi* (*Ndi-di-*). 6. *Ama-* (*Ñga-ma-*). 7. *Iki-* (*Ñki-ki-*). 8. *Ibi-* (*Mbi-bi-*). 9. *I-n-* or *I-ni-* (?Ngi-ni-). 10. Iti-, Izi-, Iti-n-, Izi-n- (?Ñgi-ti-). 12. *Utu* (?Ntu-tu-); often diminutive in sense. 11. *Ulu* (*Ndu-du-*). 13. Aka (?Nka-ka-); usually diminutive, sometimes honorific. 14. *Ubu-* (*?Mbu-bu-*); sometimes used in a plural sense; generally employed to indicate abstract nouns. 15. *Uku* (?Ñku-ku-); identical with the preposition "to," used as an infinitive with verbs, but also with certain nouns indicating primarily functions of the body. 16. Apa (Mpa-pa-); locative; applied to nouns and other forms of speech to indicate place or position;

identical with the adverb "here," as *Ku*- is with "there."

To these sixteen prefixes, the use of which is practically common to all members of the family, might perhaps be added No. 17, Fi- or Vi-, a prefix in the singular number, having a diminutive sense, which is found in some of the western and north-western Bantu tongues, chiefly in the northern half of the Congo basin and Cameroon. It is represented as far east (in the form of I-) as the Manyema language on the Upper Congo, near Tanganyika. This prefix cannot be traced to derivation from any others among the sixteen, certainly not to No. 8, as it is always used in the singular. Its corresponding plural prefix is No. 12 (Tu-). Prefix No. 18 is Ogu-, which has, as a plural prefix, No. 19, Aga-. These are both used in an augmentative sense, and their use seems to be confined to the Luganda and Masaba dialects, and perhaps some branches of the Unyoro language. These, like No. 17, are regular prefixes, since they are supplied with the concord (-gu-and -ga-). Lastly, there is the 20th prefix, Mu-, which is really a preposition meaning "in" or "into," often combined in meaning with another particle, -ni, used always as a suffix. [12] The 20th prefix, Mu-, however, does not seem to have a complete concord, as it is only used adjectivally or as a preposition and has no pronominal accusative.

The concord may be explained thus:—Let us for a moment reconstruct the original Bantu mother-tongue (as attempts are sometimes made to deduce the ancient Aryan from a comparison of the most archaic of its daughters) and propound sentences to illustrate the repetition of pronominal particles known as the concord.

Old Bantu.

Babo mbaba-ntu^[13] babi ba-bo-ta tu-ba-oga.

They these-they person they bad they who kill we fear them.

Rendered into the modern dialect of Luganda this would be:—

Bo aba-ntu ba-bi babota tu-ba-tia.

They these-they person they bad they who kill we them fear.

(They are bad people who kill; we fear them.)

Old Bantu.

Ñgu-mu-ti *ñg*uno *ñgu*-gwa ku-*ñgu*-mbona. This tree this here this falls; thou this seest? Rendered into *Kiguha* of North-West Tanganyika, this would be:— *U*m *u*ti *gu*no *gu*gwa u*gu*mona? It tree this here it falls: thou it seest?

(The tree falls; dost thou see it?)

The prefixes and their corresponding particles have varied greatly in form from the original syllables, as the various Bantu dialects became more and more corrupt. Assuming these prefixes to have consisted once of two distinct particles, such as, for example, Nos. 1 and 3, $\tilde{N}gu\text{-}mu\text{-}$, or the 6th plural prefix Nga-ma-, the first syllable seems to have been of the nature of a demonstrative pronoun, and the second more like a numeral or an adjective. Mu- probably meant "one," and Ma- a collective numeral of indefinite number, applied to liquids (especially water), a tribe of men, a herd of beasts—anything in the mass. [14] In the corresponding particles of the concord as applied to adjectives, verbs and pronouns, sometimes the first syllable, $\tilde{N}gu$ or $\tilde{N}ga$ was taken for the concord and sometimes the second mu or ma. This would account for the seemingly inexplicable lack of correspondence between the modern prefix and its accompanying particle, which so much puzzled Bleek and other early writers on the Bantu languages. In many of these tongues, for example, the particle which corresponds at the present day to the plural prefix Ma- is not always Ma, but more often Ga-, Ya-, A-; while to Mu- (Classes 1 and 3) the corresponding particle besides -mu- is qu-, qw-, u-, vu-, vu-, $\tilde{n}\text{-}$, &c.

The second prefix. Ba- or Aba-, is, in the most archaic Bantu speech (the languages of Mt. Elgon), Baba- in its definite form (Ngaba sometimes in Zulu-Kaffir). The concord is -ba- in all the less corrupt Bantu tongues, but this plural prefix degenerates into Va-, Wa-, Ma-, and A-. The concord of the 4th prefix, Mi-, is gi-, -i-, -ji-, and sometimes -mi-. The commonest form of the 5th prefix at the present day is Li- (the older and more correct is Di-), and its concord is the same; this 5th prefix is often dropped (the concord remaining) or becomes Ri-, I-, Ji-, and Ni-. The 7th prefix, Ki-, in many non-related dialects pursues a parallel course through Ci- into Si- (=Shi) and Si- and its concord resembles it. The 8th prefix is still more variable. In its oldest form this is Ibi- or Mbibi-. It is invariably the plural of the 7th. It becomes in different forms of Bantu speech Vi-, Pi-, Fi-, Fy-, Pši-, Ši-, I-, By-, Bzi-, Psi-, Zwi-, Zi- and Ri-, with a concord that is similar. The 10th prefix, which was originally Ti- or Tin-, or Zi- or Zin-, becomes Jin-, Rin-, Din-, Lin-, θin -, θon -. &c. The n in this prefix is really the singular prefix No. 9, which is sometimes retained in the plural, and sometimes omitted. In the case of the 10th prefix, the concord or corresponding pronoun persists long after the prefix has fallen out of use as a definite article. Thus, though it is absent as a plural prefix for nouns in the Swahili of Zanzibar, it reappears in the concord. For instance:—Nombe hizi zangu—Cows these mine (These cows are mine), although Nombe has ceased to be ziñombe in the plural, the Zi- particle reappears in hizi and zangu. In fact, the persistence of this concord, which exists in almost every known Bantu language in connexion with the 10th prefix, shows that prefix to have been in universal use at one time. The 11th prefix -Lu- seems to be descended from an older form, Ndu-. Its commonest type is Lu-, but it sometimes loses the L and becomes U-, and in the more archaic dialects is usually pronounced Du- or Ru-. It is also Nu- in one or two languages. The 12th prefix (Tu-), always used in a diminutive sense, disappears in many of these languages. Where met with it is generally Tu- or To-, but sometimes the initial T becomes R (Ru-, Ro-) or L (Lu-, Lo-) or even Y (Yo-), the concord following the fortunes of the prefix. The 13th prefix (Ka-) is sometimes confused with the 7th (Ki) and merged into it and vice versa. Ka- very often takes the 8th prefix as a plural, more commonly the 12th, sometimes the 14th. This prefix (Ka-) entirely disappears in the north-western section of the Bantu languages. Bleek thought that it persisted in the attenuated form of E- so characteristic of the Cameroon and northern Congo languages, but later investigations show this E- to be a reduction of Ki- (Ke-) the 7th prefix. The 14th prefix Bu- is very persistent, but frequently loses its initial letter B, which is either softened into V or W, or disappears altogether, the prefix becoming W- or W-. Sometimes this prefix becomes palatized into By- or even Tš- (C-). The concord follows suit. The 15th prefix, Ku-, occasionally loses its initial K or softens into Hu or χv or strengthens into Gu. Its concord under these circumstances sometimes remains in the form of Ku-. The 16th, Pa-, prefix is one of the most puzzling in its distribution and its phonetic changes. A very large number of the Bantu languages in the north, east and west have a dislike to the consonant P, which they frequently transmute into an aspirate (H), or soften into V, W, or F, or simply drop out. There is too much evidence in favour of this prefix having been originally Pa- or Mpa-pa to enable us to give it any other form in reconstructing the Bantu mother-tongue. Yet in the most archaic Bantu dialects to the north of the Victoria Nyanza it is nowhere found in the form of Pa-. It is either Ha- (and Hachanges eastward into Sa-!) or Wa-.[15] But for its existence in this shape in the language of Uganda one might almost be led to think that the 16th locative prefix began as Ha-, and by some process without a parallel changed in the east and south to the form of Pa-. There are, however, a good many place names in the northern part of the Uganda protectorate, in the region now occupied by Nilotic negroes, which begin with Pa-. These place names would seem to be of ancient Bantu origin in a land from which the Bantu negroes were subsequently driven by Nilotic invaders from the north. They may be relics therefore of a time before the Pa- prefix of those regions had changed to the modern form of Ha-. In S.W. and N.W. Cameroon the initial p of the 16th prefix reappears in two or three dialects; but elsewhere in North-West Bantu Africa and in the whole basin of the Congo, except the extreme south and south-east, the form Pa- is never met with; it is Va-, Wa-, Ha-, Fa-, or A-. In the Secuana group of dialects it is Fa- or Ha-; in the Luyi language of Barotseland it assumes the very rare form of Ba-, while the first prefix is weakened

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The pronouns in Bantu are in most cases traceable to some such general forms as these:—

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I, me, my \tilde{n}gi, mi, [16] \tilde{n}gu.
Thou, thee, thy gwe, ku; -ko.
He or she, him, her, his, &c a-, va-, wa- (nom.); also \tilde{n}gu-
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(which becomes yu-, ye-, wu-, hu-, u-); -mu (acc.); -ka, -kwe (poss.); there is also another form, ndi (nom. and poss.) in the Western Bantu sphere.

We, us, our isu, swi-, tu-, ti-; -tu- (acc.); -itu (poss.).

Ye, you, your inu, mu-, nyu-, nyi-, -ni; -nu, -mu- (acc.); -inu (poss.).

They, them, their babo, ba-; -ba- (acc.); -babo (poss.).
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The Bantu verb consists of a practically unchangeable root which is employed as the second person singular of the imperative. To this root are prefixed and suffixed various particles. These are worn-down verbs which have become auxiliaries or they are reduced adverbs or prepositions. It is probable (with one exception) that the building up of the verbal root into moods and tenses has taken place independently in the principal groups of Bantu languages, the arrangement followed being probably founded on a fundamental system common to the original Bantu tongue. The exception alluded to may be a method of forming the preterite tense, which seems to be shared by a great number of widely-spread Bantu languages. This may be illustrated by the Zulu tanda, love, which changes to tandile, have loved, did love. This -ile or -ili may become in other forms -idi, didi, -ire, -ine, but is always referable back to some form like -ili or ile, which is probably connected with the root li or di (ndi or ni), which means "to be" or "exist." The initial i in the particle -ile often affects the last or penultimate syllable of the verbal root, thereby causing one of the very rare changes which take place in this vocable. In many Bantu dialects the root pa (which means to give) becomes pele in the preterite (no doubt from an original pa-ile). Likewise the Zulu tandile is a contraction of tanda-ile.

Two other frequent changes of the terminal vowel of the common root are those from a (which is almost invariably the terminal vowel of Bantu verbs), (1), into e to form the subjunctive tense, (2) into i to give a negative sense in certain tenses. With these exceptions the vowel a almost invariably terminates verbal roots. The departures from this rule are so rare that it might almost be included among the elementary propositions determining the Bantu languages. And these instances when they occur are generally due (as in Swahili) to borrowed foreign words (Arabic, Portuguese or English). This point of the terminal a is the more interesting because, by changing the terminal vowel of the verbal root and possibly adding a personal prefix, one can make nouns from verbs. Thus in Luganda senyua is the verbal root for "to pardon." A pardon" or "forgiveness" is ki-senyuo. A pardoner" might be mu-senyui. In Swahili pataniša would be the verbal root for "conciliate"; mpatanaši is a "conciliator," and upatanišo is "conciliation." Another marked feature of Bantu verbs is their power of modifying the sense of the original verbal root by suffixes, the affixion of which modifies the terminal vowel and sometimes the preceding consonant of the root. Familiar forms of these variations and their usual meanings are as follows:

Supposing an original Bantu root, tanda, to love; this may become

```
tandwa to be loved.

tandeka or tandika to be lovable.

tandila or tandela^{[18]} to love for, with, or by some other person.

tandiza (or -eza) to cause to love.

tandina to love reciprocally.
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The suffix -aka or $-a\tilde{n}ga$ sometimes appears and gives a sense of continuance to the verbal root. Thus tanda may become tandaka in the sense of "to continue loving." [20]

The negative verbal particle in the Bantu languages may be traced back to an original ka, ta or sa, ki, ti or si in the Bantu mother-tongue. Apparently in the parent language this particle had already these alternative forms, which resemble those in some West African Negro languages. In the vast majority of the Bantu dialects at the present day, the negative particle in the verb (which nearly always coalesces with the pronominal particle) is descended from this ka, ta or sa, ki, ti or si, assuming the forms of ka, ga, nga, sa, ta, ta

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Ka-nginot I.(Therefore Ka-ngi tanda = not I love.)Ka-ku or ka-wunot thou.Ka-anot he, she.Ka-tunot we.Ka-nunot ye.Ka-banot they.
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In like manner sa would become sa-ngi, sa-wu, &c. But very early in the history of Bantu languages ka-ngi, or sa-ngi, became contracted into kai, sai, and finally, ki, si; ka-ku or ka-wu into ku; and kaa or saa have always been ka or sa. Sometimes in the modern languages the negative particle (such as ti or si) is used without any vestige of a pronoun being attached to it, and is applied indifferently to all the persons. Occasionally this particle has fallen out of use, and the negative is expressed (1) by stress or accent; (2) by suffix (traceable to a root -pe or -ko) answering to the French pas, and having the same sense; and (3) by the separate employment of an adverb. If not a few Bantu languages, the verb used in a negative sense changes its terminal -a to -a: thus, tanda = love; -tanda = may love.

BIBLIOGRAPHY.—A Comparative Grammar of South African Languages (in two parts, left unfinished), by Dr W. I. Bleek (London, 1869); A Sketch of the Modern Languages of Africa, by R. N. Cust (1882); Comparative Grammar of the South African Bantu Languages, by Father J. Torrend (1894; mainly composed on a study of the languages of the Central Zambezi, interesting, but erroneous in some deductions, and incomplete). In Sir H. H. Johnston's The Kilimanjaro Expedition (1884), British Central Africa (1898), and The Uganda Protectorate (1902-1904), there are illustrative vocabularies; and in George Grenfell and the Congo (1908) the Congo groups of Bantu speech are carefully classified, also the Fernandian and Cameroon. In the numerous essays of Carl Meinhof on the original structure of the Bantu mother-speech, and on existing languages in East and South-East Africa, in the Mittheilungen des Seminärs für Orientalische Sprachen, Berlin (also issued separately through Brockhaus, Leipzig, 1899), and also in his Grundzüge einer vergleichenden Grammatik der Bantusprachen (Berlin, 1906), a vast amount of valuable information has been collected, but Meinhof's deductions therefrom are not in every case in accord with those of other authorities. The Swahili-English Dictionary, by Dr L. Krapf (London, 1882), contains a mass of not well-sorted but invaluable information concerning the Swahili language as spoken on the coast of East Africa, especially regarding many words now becoming obsolete. A similar mine of information is to be found in An Encyclopaedic Dictionary of the Manañja (Mang'anja) Language of British Central Africa, by the Rev. D. C. Scott (1891). Other admirable works are the Dictionary of the Congo Language, by the Rev. Holman Bentley (1891), and The Folklore of Angola, and a Grammar of Kimbundu, by Dr. Heli Chatelain. The many handbooks and vocabularies written and published by Bishop Steere on the languages of the East African coast-lands are of great importance to the student, especially as they give forms of the prefixes now passing out of use. The Introductory Handbook of the Yao Language, by the Rev. Alexander Hetherwick, illustrates very fully that peculiar and important member of the East African group. Vocabularies of various Congo languages have been compiled by Dr. A. Sims; more important works on this subject have been published by the Rev. W. H. Stapleton (Comparative Handbook of Congo Languages), and by Rev. John Whitehead (Grammar and Dictionary of the Bobangi Language (London, 1899). E. Torday has illustrated the languages of the Western Congo basin (Kwango, Kwilu, northern Kasai) in the Journal of the Royal Anthropological Institute. There is a treatise on the Lunda language of the southwestern part of the Belgian Congo, in Portuguese, by Henrique de Carvalho, who also in his Ethnographia da Expedicaõ portugueza ao Muata Yanvo goes deeply into Bantu language questions. The Duala language of Cameroon, has been illustrated by the Baptist missionary Saker in his works published about 1860, and since 1900 by German missionaries and explorers (such as Schuler). The German work on the Duala language is mostly published in the Mittheilungen des Seminärs für Orientalische Sprachen (Berlin); see also Schuler's Grammatik des Duala. The Rev. S. Koelle, in his Polyglotta Africana, published in 1851, gave a good many interesting vocabularies of the almost unknown north-west Bantu borderland, as well as of other forms of Bantu speech of the Congo coast and Congo basin. J. T. Last, in his Polyglotta Africana Orientalis, has illustrated briefly many of the East African dialects and languages, some otherwise touched by no one else. He has also published an excellent grammar of the Kaguru language of the East African highlands (Usagara). The fullest information is now extant regarding the languages of Uganda and Unyoro, in works by the missionaries of the Church Missionary Society (Pilkington, Blackledge, Hattersley, Henry Duta and others). Mr Crabtree, of the same mission, has collected information regarding the Masaba dialects of Elgon, and these have also been illustrated by Mr C. W. Hobley, and by Sir H. H. Johnston (*Uganda Protectorate*), and privately by Mr S. A. Northcote. Mr A. C. Madan has published works on the Swahili language and on the little-known Senga of Central Zambezia and Wisa of North-East Rhodesia (Oxford University Press). Jacottet (Paris, 1902) has in his Grammaire Subiya provided an admirable study of the Subiya and Luyi languages of Barotseland, and in 1907, Edwin W. Smith (Oxford University Press) brought out a Handbook of the Ila Language (Mashukulumbwe). The Rev. W. Govan Robertson is the author of a complete study of the Bemba language. Mrs Sydney Hinde has illustrated the dialects of Kikuyu and Kamba. F. Van der Burgt has published a Dictionary of Kirundi (the language spoken at the north end of Tanganyika). Oci-herero of Damaraland has chiefly been illustrated by German writers, old and new; such as Dr Kolbe and Dr P. H. Brincker. The northern languages of this Herero group have been studied by members of the American Mission at Bailundu under the name of *Umbundu*. Some information on the languages of the south-western part of the Congo basin and those of south-eastern Angola may be found in the works of Capello and Ivens and of Henrique de Carvalho and Commander V. L. Cameron. The British, French and German missionaries have published many dictionaries and grammars of the different Secuana dialects, notable amongst which is John Brown's Dictionary of Secuana and Meinhof's Study of the Tšivenda. The grammars and dictionaries of Zulu-Kaffir are almost too numerous to catalogue. Among the best are Maclaren's Kafir Grammar and Roberts' Zulu Dictionary. The works of Boyce,

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Appleyard and Bishop Colenso should also be consulted. Miss A. Werner has written important studies on the Zulu click-words and other grammatical essays and vocabularies of the Bantu languages in the *Journal of the African Society* between 1902 and 1906. The Tebele dialect of Zulu has been well illustrated by W. A. Elliott in his *Dictionary of the Tebele and Shuna languages* (London, 1897). The *Ronga* (*Tonga, Si-gwamba, Hlengwe*, &c.) are dealt with in the *Grammaire Ronga* (Lausanne, 1896) of Henri Junod. Bishop Smyth and John Mathews have published a vocabulary and short grammar of the *Xilenge* (Shilenge) language of Inhambane (*S.P.C.R.*, 1902). The journal *Anthropos* (Vienna) should also be consulted.

(H. H. J.)

- [1] Bantu (literally Ba-ntu) is the most archaic and most widely spread term for "men," "mankind," "people," in these languages. It also indicates aptly the leading feature of this group of tongues, which is the governing of the unchangeable root by prefixes. The syllable -ntu is nowhere found now standing alone, but it originally meant "object," or possibly "person." It is also occasionally used as a relative pronoun—"that," "that which," "he who." Combined with different prefixes it has different meanings. Thus (in the purer forms of Bantu languages) muntu means "a man," bantu means "men," kintu means "a thing," bintu "things," kantu means "a little thing," tuntu "little things," and so on. This term Bantu has been often criticized, but no one has supplied a better, simpler designation for this section of Negro languages, and the name has now been definitely consecrated by usage.
- [2] In Luganda and other languages of Uganda and the Victoria Nyanza, and also in Runyoro on the Victoria Nile, the word for "fowl" is *enkoko*. In Ki-Swahili of Zanzibar it is *kuku*. In Zulu it is *inkuku*. In some of the Cameroon languages it is *lokoko*, *ngoko*, *ngok*, and on the Congo it is *nkogo*, *nsusu*. On the Zambezi it is *nkuku*; so also throughout the tribes of Lakes Nyasa and Tanganyika, and most dialects of South Africa.
- [3] From this statement are excepted those tongues classified as "semi-Bantu." In some languages of the Lower Niger and of the Gold Coast the word for "fowl" is generally traceable to a root *kuba*. This form *kuba* also enters the Cameroon region, where it exists alongside of *-koko*. *Kuba* may have arisen independently, or have been derived from the Bantu *kuku*.
- [4] Whence the many *nyanza*, *nyanja*, *nyasa*, *mwanza*, of African geography.
- [5] In using the forms Uganda, Unyoro, the writer accepts the popular mis-spelling. These countries should be called Buganda and Bunyoro, and their languages Luganda and Runyoro.
- [6] It is an important and recently discovered fact (delineated in the work of the Baptist missionaries and of the Austrian traveller Dr. Franz Thonner) that the Congo at its northern and north-eastern bend, between the Rubi river and Stanley Falls, lies outside the Bantu field. The *Bondonga* and *Wamanga* languages are not Bantu. They are allied to the *Mbuba-Momfu* of the Ituri and Nepoko, and also to the *Mundu* of the Egyptian Sudan. The Mundu group extends westward to the Ubangi river, as far south as 3° 30′ N. See *George Grenfell and the Congo*, by Sir Harry Johnston; and *Dans la Grande Forêt de l'Afrique équatoriale*, by Franz Thonner (1899).
- [7] These features are characteristic of almost all the Negro languages of Africa.
- [8] This does not preclude the *aspiration* of consonants, or the occasional local change of a palatal into a guttural.
- [9] As already mentioned, a somewhat similar concord is also present as regards the *suffixes* of the Fula and the Kiama (*Tem*) languages in Western Africa, and as regards the *prefixes* of the Timne language of Sierra Leone; it exists likewise in Hottentot and less markedly in many Aryan, Semitic and Hamitic tongues.
- [10] An apparent but not a real exception to this rule is in the second person plural of the imperative mood, where an abbreviated form of the pronoun is *affixed* to the verb. Other phases of the verb may be occasionally emphasized by the repetition of the governing pronoun at the end.
- [11] The full hypothetical forms of the prefixes as joined with definite articles— $\tilde{N}gumu$, Mbaba, $\tilde{N}gimi$, $\tilde{N}gama$ and so on—are added in brackets. Forms very like these are met with still in the Mt. Elgon languages (Group No. 3) and in Subiya group (No. 32).
- [12] This is prominently met with in East Africa, and also in the various Bechuana dialects of Central South Africa, where it takes the form of \tilde{n} at the end of words.
- [13] Or perhaps $\tilde{n}ga$ -ba-ntu (afterwards $\tilde{n}a$ -ba-, aba-); the form $\tilde{n}ga$ bantu is actually met with in Zulu-Kaffir: also $\tilde{n}g$ umuntu.
- [14] Likewise ba- may have meant "two" (Bantu root Bali = two); a dual first and then a plural.
- [15] Wa- in Luganda. In Lusoga (north coast of Victoria Nyanza) Wa- becomes Γa (Gha).
- [16] Mi is possibly a softening of $\tilde{n}gi$, $\tilde{n}i$; $\tilde{n}gi$ becomes in some dialects nji, ndi, ni or mbi;

there is in some of the coast Cameroon languages, and in the north-eastern Congo, a word *mbi*, *mba* for "I," "me," which seems to be borrowed from the Sudanian Mundu tongues. The possessive pronoun for the first person is devired from two forms, *-ami* and *-añgi* (*-am*, *-añgu*, *-anji*, *-ambi*, &c.).

- [17] An exception to this rule is the verbal particle *li* or *di*, which means "to be."
- [18] Or -ira, -era.
- [19] This form may also appear as \check{sa} , as for instance aka—to be on fire becomes $a\check{sa}$, to set on fire.
- [20] In choosing this common root *tanda*, and applying it to the above various terminations, the writer is not prepared to say that it is associated with all of them in any one Bantu language. Although *tanda* is a common verb in Zulu, it has not in Zulu *all* these variations, and in some other language where it may by chance exhibit all the variations its own form is changed to *londa* or *randa*.

BANVILLE, THÉODORE FAULLAIN DE (1823-1891), French poet and miscellaneous writer, was born at Moulins in the Bourbonnais, on the 14th of March 1823. He was the son of a captain in the French navy. His boyhood, by his own account, was cheerlessly passed at a lycée in Paris; he was not harshly treated, but took no part in the amusements of his companions. On leaving school with but slender means of support, he devoted himself to letters, and in 1842 published his first volume of verse (Les Cariatides), which was followed by Les Stalactites in 1846. The poems encountered some adverse criticism, but secured for their author the approbation and friendship of Alfred de Vigny and Jules Janin. Henceforward Banville's life was steadily devoted to literary production and criticism. He printed other volumes of verse, among which the Odes funambulesques (Alençon, 1857) received unstinted praise from Victor Hugo, to whom they were dedicated. Later, several of his comedies in verse were produced at the Théâtre Français and on other stages; and from 1853 onwards a stream of prose flowed from his industrious pen, including studies of Parisian manners, sketches of well-known persons (Camées parisiennes, &c.), and a series of tales (Contes bourgeois, Contes héroïques, &c.), most of which were republished in his collected works (1875-1878). He also wrote freely for reviews, and acted as dramatic critic for more than one newspaper. Throughout a life spent mainly in Paris, Banville's genial character and cultivated mind won him the friendship of the chief men of letters of his time. He was also intimate with Frédérick-Lemaître and other famous actors. In 1858 he was decorated with the legion of honour, and was promoted to be an officer of the order in 1886. He died in Paris on the 15th of March 1891, having just completed his sixty-eighth year. Banville's claim to remembrance rests mainly on his poetry. His plays are written with distinction and refinement, but are deficient in dramatic power; his stories, though marked by fertility of invention, are as a rule conventional and unreal. Most of his prose, indeed, in substance if not in manner, is that of a journalist. His lyrics, however, rank high. A careful and loving student of the finest models, he did even more than his greater and somewhat older comrades, Victor Hugo, Alfred de Musset and Théophile Gautier, to free French poetry from the fetters of metre and mannerism in which it had limped from the days of Malherbe. In the Odes funambulesques and elsewhere he revived with perfect grace and understanding the rondeau and the villanelle, and like Victor Hugo in Les Orientales, wrote pantoums (pantuns) after the Malay fashion. He published in 1872 a Petit traité de versification française in exposition of his metrical methods. He was a master of delicate satire, and used with much effect the difficult humour of sheer bathos, happily adapted by him from some of the early folk-songs. He has somewhat rashly been compared to Heine, whom he profoundly admired; but if he lacked the supreme touch of genius, he remains a delightful writer, who exercised a wise and sound influence upon the art of his generation.

Among his other works may be mentioned the poems, *Idylles prussiennes* (1871), and *Trente-six ballades joyeuses* (1875); the prose tales, *Les Saltimbanques* (1853); *Esquisses parisiennes* (1859) and *Contes féeriques*; and the plays, *Le Feuilleton d'Aristophane* (1852), *Gringoire* (1866), and *Deidamia* (1876).

See also J. Lemaître, *Les Contemporains* (first series, 1885); Sainte-Beuve, *Causeries du lundi*, vol. xiv.; Maurice Spronck, *Les Artistes littéraires* (1889).

(C.)

BANYAN, or Banian (an Arab corruption, borrowed by the Portuguese from the Sanskrit *vanij*, "merchant"), the *Ficus Indica*, or *Bengalensis*, a tree of the fig genus. The name was originally given by Europeans to a particular tree on the Persian Gulf beneath which some Hindu "merchants" had built a pagoda. In Calcutta the word was once generally applied to a native broker or head clerk in any business or private house, now usually known as sircar. *Bunya*, a corruption of the word common in Bengal generally, is usually applied to the native grain-dealer. Early writers sometimes use the term generically for all Hindus in western India. *Banyan* was long Anglo-Indian for an undershirt, in allusion to the body garment of the Hindus, especially the Banyans.

Banyan days is a nautical slang term. In the British navy there were formerly two days in each week on which meat formed no part of the men's rations. These were called banyan days, in allusion to the vegetarian diet of the Hindu merchants. Banyan hospital also became a slang term for a hospital for animals, in reference to the Hindu's humanity and his dislike of taking the life of

any animal.

BAOBAB, Adansonia digitata (natural order Bombaceae), a native of tropical Africa, one of the largest trees known, its stem reaching 30 ft. in diameter, though the height is not great. It has a large woody fruit, containing a mucilaginous pulp, with a pleasant cool taste, in which the seeds are buried. The bark yields a strong fibre which is made into ropes and woven into cloth. The wood is very light and soft, and the trunks of living trees are often excavated to form houses. The name of the genus was given by Linnaeus in honour of Michel Adanson, a celebrated French botanist and traveller.

BAPHOMET, the imaginary symbol or idol which the Knights Templars were accused of worshipping in their secret rites. The term is supposed to be a corruption of Mahomet, who in several medieval Latin poems seems to be called by this name. J. von Hammer-Purgstall, in his $Mysterium\ Baphometis\ relevatum$, &c., and $Die\ Schuld\ der\ Templer$, revived the old charge against the Templars. The word, according to his interpretation, signifies the baptism of Metis, or of fire, and is, therefore, connected with the impurities of the Gnostic Ophites (q.v.). Additional evidence of this, according to Hammer-Purgstall, is to be found in the architectural decorations of the Templars' churches.

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An elaborate criticism of Hammer-Purgstall's arguments was made in the *Journal des Savans*, March and April 1819, by M. Raynouard, a well-known defender of the Templars. (See also Hallam, *Middle Ages*, c. i. note 15.)

BAPTISM. The Gr. words βαπτισμός and βάπτισμα (both of which occur in the New Testament) signify "ceremonial washing," from the verb βαπτίζω, the shorter form βάπτω meaning "dip" without ritual significance (e.g. the finger in water, a robe in blood). That a ritual washing away of sin characterized other religions than the Christian, the Fathers of the church were aware, and Tertullian notices, in his tract On Baptism (ch. v.), that the votaries of Isis and Mithras were initiated per lavacrum, "through a font," and that in the Ludi Apollinares et Eleusinii, i.e. the mysteries of Apollo and Eleusis, men were baptized (tinguntur, Tertullian's favourite word for baptism), and, what is more, baptized, as they presumed to think, "unto regeneration and exemption from the guilt of their perjuries." "Among the ancients," he adds, "anyone who had stained himself with homicide went in search of waters that could purge him of his guilt."

The texts of the New Testament relating to Christian baptism, given roughly in chronological order, are the following:—

A.D. 55-60, Rom. vi. 3, 4; 1 Cor. i. 12-17, vi. 11, x. 1-4, xii. 13, xv. 29; Gal. iii. 27.

A.D. 60-65, Col. ii. 11, 12; Eph. iv. 5, v. 26.

A.D. 60-70, Mark x. 38, 39.

A.D. 80-90, Acts i. 5, ii. 38-41, viii. 16, 17, x. 44-48, xix. 1-7, xxii. 16; 1 Pet. iii. 20, 21; Heb. x. 22.

A.D. 90-100, John iii. 3-8, iii. 22, iii. 26, iv. 1, 2.

Uncertain, Matt, xxviii. 18-20; Mark xvi. 16.

The baptism of John is mentioned in the following:—

A.D. 60-70, Mark i. 1-11.

A.D. 80-90, Matt. iii. 1-16:; Luke iii. 1-22, vii. 29, 30; Acts i. 22, x. 37, xiii. 24, xviii. 25, xix. 3, 4.

A.D. 90-100, John i. 25-33, iii. 23, x. 40.

It is best to defer the question of the origin of Christian baptism until the history of the rite in the centuries which followed has been sketched, for we know more clearly what baptism became after the year 100 than what it was before. And that method on which a great scholar^[1] insisted when studying the old Persian religion is doubly to be insisted on in the study of the history of baptism and the cognate institution, the eucharist, namely, to avoid equally "the narrowness of mind which clings to matters of fact without rising to their cause and connecting them with the series of associated phenomena, and the wild and uncontrolled spirit of comparison, which, by comparing everything, confounds everything."

Our earliest detailed accounts of baptism are in the Teaching of the Apostles (c. 90-120) and in Justin Martyr.

The *Teaching* has the following:—

- 1. Now concerning baptism, thus baptize ye: having spoken beforehand all these things, baptize into the name of the Father and of the Son and of the Holy Spirit, in living water.
- 2. But if thou hast not living water, baptize into other water; if thou canst not in cold, in warm.
- 3. But if thou hast not either, pour water upon the head thrice, in the name of the Father and of the Son and of the Holy Spirit.
- 4. Now before the baptism, let him that is baptizing and him that is being baptized fast, and any others who can; but thou biddest him who is being baptized to fast one or two days before.

The "things spoken beforehand" are the moral precepts known as the two ways, the one of life

and the other of death, with which the tract begins. This body of moral teaching is older than the rest of the tract, and may go back to the year A.D. 80.

Justin thus describes the rite in ch. lxi. of his first Apology, (c. 140):—

"I will also relate the manner in which we dedicated ourselves to God when we had been made new through Christ. As many as are persuaded and believe that what we teach and say is true, and undertake to be able to live accordingly, are instructed to pray and entreat God with fasting, for the remission of their sins that are past, we praying and fasting with them. Then they are brought by us where there is water, and are regenerated in the same manner in which we were ourselves regenerated. For in the name of God, the Father and Lord of the universe, and of our Saviour Jesus Christ and of the Holy Spirit, they then receive the washing with water."

In the sequel Justin adds:—

"There is pronounced over him who chooses to be born again, and has repented of his sins, the name of God the Father and Lord of the universe, he who leads to the laver the person that is to be washed calling Him by this name alone. For no one can utter the name of the ineffable God, and this washing is called Illumination (Gr. φωτισμός), because they who learn these things are illuminated in their understandings. And in the name of Jesus Christ, who was crucified under Pontius Pilate, and in the name of the Holy Ghost, who through the prophets foretold all things about Jesus, he who is illuminated is washed."

In ch. xiv. of the dialogue with Trypho, Justin asserts, as against Jewish rites of ablution, that Christian baptism alone can purify those who have repented. "This," he says, "is the water of life. But the cisterns which you have dug for yourselves are broken and profitless to you. For what is the use of that baptism which cleanses the flesh and body alone? Baptize the soul from wrath, from envy and from hatred; and, lo! the body is pure."

In ch. xliii. of the same dialogue Justin remarks that "those who have approached God through Jesus Christ have received a circumcision, not carnal, but spiritual, after the manner of Enoch."

In after ages baptism was regularly called illumination. Late in the 2nd century Tertullian describes the rite of baptism in his treatise On the Resurrection of the Flesh, thus:

- 1. The flesh is washed, that the soul may be freed from stain.
- 2. The flesh is anointed, that the soul may be consecrated.
- 3. The flesh is sealed (i.e. signed with the cross), that the soul also may be protected.
- 4. The flesh is overshadowed with imposition of hands, that the soul also may be illuminated by the Spirit.
- 5. The flesh feeds on the body and blood of Christ, that the soul also may be filled and sated with
- 6. He also mentions elsewhere that the neophytes, after baptism, were given a draught of milk and honey. (The candidate for baptism, we further learn from his tract On Baptism, prepared himself by prayer, fasting and keeping of vigils.)

Before stepping into the font, which both sexes did quite naked, the neophytes had to renounce the devil, his pomps and angels. Baptisms were usually conferred at Easter and in the season of Pentecost which ensued, and by the bishop or by priests and deacons commissioned by him.

Such are the leading features of the rite in Tertullian, and they reappear in the 4th century in the rites of all the orthodox churches of East and West; Tertullian testifies that the Marcionites observed the particulars numbered one to six, which must therefore go back at least to the year 150. About the year 300, those desirous of being baptized were (a) admitted to the catechumenate, giving in their names to the bishop. (b) They were subjected to a scrutiny and prepared, as to-day in the western churches the young are prepared for confirmation. The catechetic course included instruction in monotheism, in the folly of polytheism, in the Christian scheme of salvation, &c. (c) They were again and again exorcized, in order to rid them of the lingering taint of the worship of demons. (d) Some days or even weeks beforehand they had the creed recited to them. They might not write it down, but learned it by heart and had to repeat it just before baptism. This rite was called in the West the traditio and redditio of the symbol. The [v.03 p.0365] Lord's Prayer was communicated with similar solemnity in the West (traditio precis). The creed given in Rome was the so-called Apostles' Creed, originally compiled as we now have it to exclude Marcionites. In the East various other symbols were used. (e) There followed an act of unction, made in the East with the oil of the catechumens blessed only by the priest, in the West with the priest's saliva applied to the lips and ears. The latter was accompanied by the following formula: "Effeta, that is, be thou opened unto odour of sweetness. But do thou flee, O Devil, for the judgment of God is at hand." (f) Renunciation of Satan. The catechumens turned to the west in pronouncing this; then turning to the east they recited the creed. (g) They stepped into the font, but were not usually immersed, and the priest recited the baptismal formula over them as he poured water, generally thrice, over their heads. (h) They were anointed all over with chrism or scented oil, the priest reciting an appropriate formula. Deacons anointed the males, deaconesses the females. (i) They put on white garments and often baptismal wreaths or chaplets as well. In some churches they had worn cowls during the catechumenate, in sign of repentance of their sins. (i) They received the sign of the cross on the brow; the bishop usually dipped his thumb in

the chrism and said: "In name of Father, Son and Holy Ghost, peace be with thee." In laying his hands on their heads the bishop in many places, especially in the West, called down upon them the sevenfold spirit. (k) The first communion followed, with milk and honey added. (l) Usually the water in the font was exorcized, blessed and chrism poured into it, just before the catechumen entered it. (m) Easter was the usual season of baptism, but in the East Epiphany was equally favoured. Pentecost was sometimes chosen. We hear of all three feasts being habitually chosen in Jerusalem early in the 4th century, but fifty years later baptisms seem to have been almost confined to Easter. The preparatory fasts of the catechumens must have helped to establish the Lenten fast, if indeed they were not its origin.

Certain features of baptism as used during the earlier centuries must now be noticed. They are the following:—(1) Use of fonts; (2) Status of baptizer; (3) Immersion, submersion or aspersion; (4) Exorcism; (5) Baptismal formula and trine immersion; (6) The age of baptism; (7) Confirmation; (8) *Disciplina arcani*; (9) Regeneration; (10) Relation to repentance; (11) Baptism for the dead; (12) Use of the name; (13) Origin of the institution; (14) Analogous rites in other religions.

1. Fonts.—The New Testament, the Didachē, Justin, Tertullian and other early sources do not enjoin the use of a font, and contemplate in general the use of running or living water. It was a Jewish rule that in ablutions the water should run over and away from the parts of the body washed. In acts of martyrdom, as late as the age of Decius, we read of baptisms in rivers, in lakes and in the sea. In exceptional cases it sufficed for a martyr to be sprinkled with his own blood. But a martyr's death in itself was enough. Nearchus (c. 250) quieted the scruples of his unbaptized friend Polyeuctes, when on the scaffold he asked if it were possible to attain salvation without baptism, with this answer: "Behold, we see the Lord, when they brought to Him the blind that they might be healed, had nothing to say to them about the holy mystery, nor did He ask them if they had been baptized; but this only, whether they came to Him with true faith. Wherefore He asked them, Do ye believe that I am able to do this thing?"

Tertullian (c. 200) writes (de Bapt. iv.) thus: "It makes no difference whether one is washed in the sea or in a pool, in a river or spring, in a lake or a ditch. Nor can we distinguish between those whom John baptized (tinxit) in the Jordan and those whom Peter baptized in the Tiber." The custom of baptizing in the rivers when they are annually blessed at Epiphany, the feast of the Lord's baptism, still survives in Armenia and in the East generally. Those of the Armenians and Syrians who have retained adult baptism use rivers alone at any time of year.

The church of Tyre described by Eusebius ($H.E. \times .4$) seems to have had a font, and the church order of Macarius, bishop of Jerusalem (c. 311-335), orders the font to be placed in the same building as the altar, behind it and on the right hand; but the same order lays down that a font is not essential in cases of illness for "the Holy Spirit is not hindered by want of a vessel."

- 2. Status of Baptizer.—Ignatius (Smyrn. viii.) wrote that it is not lawful to baptize or hold an agapē (Lord's Supper) without the bishop. So Tertullian (de Bapt. xvii.) reserves the right of admitting to baptism and of conferring it to the summus sacerdos or bishop, Cyprian (Epist. lxxiii. 7) to bishops and priests. Later canons continued this restriction; and although in outlying parts of Christendom deacons claimed the right, the official churches accorded it to presbyters alone and none but bishops could perform the confirmation or seal. In the Montanist churches women baptized, and of this there are traces in the earliest church and in the Caucasus. Thus St Thekla baptized herself in her own blood, and St Nino, the female evangelist of Georgia, baptized king Mirian (see "Life of Nino," Studia Biblica, 1903). In cases of imminent death a layman or a woman could baptize, and in the case of new-born children it is often necessary.
- 3. Immersion or Aspersion.—The Didachē bids us "pour water on the head," and Christian pictures and sculptures ranging from the 1st to the 10th century represent the baptizand as standing in the water, while the baptizer pours water from his hand or from a bowl over his head. Even if we allow for the difficulty of representing complete submersion in art, it is nevertheless clear that it was not insisted on; nor were the earliest fonts, to judge from the ruins of them, large and deep enough for such an usage. The earliest literary notices of baptism are far from conclusive in favour of submersion, and are often to be regarded as merely rhetorical. The rubrics of the MSS., it is true, enjoin total immersion, but it only came into general vogue in the 7th century, "when the growing rarity of adult baptism made the Gr. word $\beta\alpha\pi\tau(\zeta\omega)$ patient of an interpretation that suited that of infants only." The Key of Truth, the manual of the old Armenian Baptists, archaically prescribes that the penitent admitted into the church shall advance on his knees into the middle of the water and that the elect one or bishop shall then pour water over his head.
- 4. Exorcism.—The $Didach\bar{e}$ and Justin merely prescribe fasting, the use of which was to hurry the exit of evil spirits who, in choosing a nidus or tenement, preferred a well-fed body to an emaciated one, according to the belief embodied in the interpolated saying of Matt. xvii. 21: "This kind (of demon) goeth not forth except by prayer and fasting." The exorcisms tended to become longer and longer, the later the rite. The English prayer-book excludes them, as it also excludes the renunciation of the devil and all his angels, his pomps and works. These elements were old, but scarcely primitive; and the archaic rite of the $Extit{Key of Truth}$ (see Paulicians) is without them. Basil, in his work $Extit{On the Holy Spirit}$, confesses his ignorance of how these and other features of his baptismal rite had originated. He instances the blessing of the water of baptism, of the oil of anointing and of the baptizand himself, the use of anointing him with oil, trine immersion, the formal renunciation of Satan and his angels. All these features, he says, had been handed down in

an unpublished and unspoken teaching, in a silent and sacramental tradition.

5. The Baptismal Formula.—The trinitarian formula and trine immersion were not uniformly used from the beginning, nor did they always go together. The Teaching of the Apostles, indeed, prescribes baptism in the name of Father, Son and Holy Ghost, but on the next page speaks of those who have been baptized into the name of the Lord—the normal formula of the New Testament. In the 3rd century baptism in the name of Christ was still so widespread that Pope Stephen, in opposition to Cyprian of Carthage, declared it to be valid. From Pope Zachariah (Ep. x.) we learn that the Celtic missionaries in baptizing omitted one or more persons of the Trinity, and this was one of the reasons why the church of Rome anathematized them; Pope Nicholas, however (858-867), in the Responsa ad consulta Bulgarorum, allowed baptism to be valid tantum in nomine Christi, as in the Acts. Basil, in his work On the Holy Spirit just mentioned, condemns "baptism into the Lord alone" as insufficient. Baptism "into the death of Christ" is often specified by the Armenian fathers as that which alone was essential.

Ursinus, an African monk (in Gennad. *de Scr. Eccl.* xxvii.), Hilary (*de Synodis*, lxxxv.), the synod of Nemours (A.D. 1284), also asserted that baptism into the name of Christ alone was valid. The formula of Rome is, "I baptize thee in the name of Father and Son and Holy Spirit." In the East, "so-and-so, the servant of God, is baptized," &c. The Greeks add *Amen* after each person, and conclude with the words, "Now and ever and to aeons of aeons, amen."

We first find in Tertullian trine immersion explained from the triple invocation, *Nam nec semel, sed ter, ad singula nomina in personas singulas tinguimur*: "Not once, but thrice, for the several names, into the several persons, are we dipped" (*adv. Prax.* xxvi.). And Jerome says: "We are thrice plunged, that the one sacrament of the Trinity may be shown forth." On the other hand, in numerous fathers of East and West, *e.g.* Leo of Rome, Athanasius, Gregory of Nyssa, Theophylactus, Cyril of Jerusalem and others, trine immersion was regarded as being symbolic of the three days' entombment of Christ; and in the Armenian baptismal rubric this interpretation is enjoined, as also in an epistle of Macarius of Jerusalem addressed to the Armenians (*c.* 330). In Armenian writers this interpretation is further associated with the idea of baptism into the death of Christ.

Trine immersion then, as to the origin of which Basil confesses his ignorance, must be older than either of the rival explanations. These are clearly aetiological, and invented to explain an existing custom, which the church had adopted from its pagan medium. For pagan lustrations were normally threefold; thus Virgil writes (*Aen.* vi. 229): *Ter socios pura circumtulit unda*. Ovid (*Met.* vii. 189 and *Fasti*, iv. 315), Persius (ii. 16) and Horace (*Ep.* i. 1. 37) similarly speak of trine lustrations; and on the last mentioned passage the scholiast Acro remarks: "He uses the words *thrice purely*, because people in expiating their sins, plunge themselves in thrice." Such examples of the ancient usage encounter us everywhere in Greek and Latin antiquity.

6. Age of Baptism.—In the oldest Greek, Armenian, Syrian and other rites of baptism, a service of giving a Christian (i.e. non-pagan) name, or of sealing a child on its eighth day, is found. According to it the priest, either at the door of the church or at the home, blessed the infant, sealed it (this not in Armenia) with the sign of the cross on its forehead, and prayed that in due season (ἐν καιρῷ εὐθέτῳ) or at the proper time (Armenian) it may enter the holy Catholic church. This rite announces itself as the analogue of Christ's circumcision.

On the fortieth day from birth another rite is prescribed, of churching the child, which is now taken *into* the church with its mother. Both are blessed by the clergy, whose petition now is that God "may preserve this child and cause him to grow up by the unseen grace of His power and made him worthy in due season of the washing of baptism." As the first rite corresponds to the circumcision and naming of Jesus, so does the second to His presentation in the temple. These two rites really begin the catechumenate or period of instruction in the faith and discipline of the church. It depended on the individual how long he would wait for initiation. Whenever he felt inclined, he gave in his name as a candidate. This was usually done at the beginning of Lent. The bishop and clergy next examined the candidates one by one, and ascertained from their neighbours whether they had led such exemplary lives as to be worthy of admission. In case of strangers from another church certificates of character had to be produced. If a man seemed unworthy, the bishop dismissed him until another occasion, when he might be worthier; but if all was satisfactory he was admitted, in the West as a competens or asker, in the East as a φωτιζόμενος, i.e. one in course of being illumined. Usually two sponsors made themselves responsible for the past life of the candidate and for the sincerity of his faith and repentance. The essential thing was that a man should come to baptism of his own free will and not under compulsion or from hope of gain. Macarius of Jerusalem (op. cit.) declares that the grace of the spirit is given in answer to our prayers and entreaties for it, and that even a font is not needful, but only the wish and desire for grace. Tertullian, however, in his work On Baptism, holds that even that is not always enough. Some girls and boys at Carthage had asked to be baptized, and there were some who urged the granting of their request on the score that Christ said: "Forbid them not to come unto Me" (Matt. xix. 14), and: "To each that asketh thee give" (Luke vi. 30). Tertullian replies that "We must beware of giving the holy thing to dogs and of casting pearls before swine." He cites 1 Tim. v. 22: "Lay not on thy hands hastily, lest thou share in another's sins." He denies that the precedents of the eunuch baptized by Philip or of Paul baptized without hesitation by Simon (to which the other party appealed) were relevant. He dwells on the risk run by the sponsors, in case the candidates for whose purity they went bail should fall into sin. It is more expedient, he concludes, to delay baptism. Why should persons still in the age of innocence be in a hurry to be baptized and win remission of sins? Let people first learn to feel their need of

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salvation, so that we may be sure of giving it only to those who really want it. Especially let the unmarried postpone it. The risks of the age of puberty are extreme. Let people have married or be anyhow steeled in continence before they are admitted to baptism. It would appear from the homilies of Aphraates (c. 340) that in the Syriac church also it was usual to renounce the married relation after baptism. Cyril of Jerusalem, in his Catecheses, insists on "the longing for the heavenly polity, on the goodly resolution and attendant hope" of the catechumen (Pro. Cat. ch. 1.). If the resolution be not genuine, the bodily washing, he says, profits nothing. "God asks for nothing else except a goodly determination. Say not: How can my sins be wiped out? I tell thee, by willing, by believing" (ch. viii.). So again (Cat. 1. ch. iii.) "God gives not his holy treasures to the dogs; but where he sees the goodly determination, there he bestows the seed of salvation.... Those then who would receive the spiritual saving seal have need of a determination and will of their own.... Grace has need of faith on our part." In Jerusalem, therefore, whither believers flocked from all over Christendom to be buried, the official point of view as late as A.D. 350 was entirely that of Tertullian. Tertullian's scruples were not long respected in Carthage, for in Cyprian's works (c. 250.) we already hear of new-born infants being baptized. In the same region of Africa, however, Monica would not let her son Augustine be baptized in boyhood, though he clamoured to be. She was a conservative. In the Greek world thirty was a usual age in the 4th century for persons to be baptized, in imitation of Christ. It is still the age preferred by the Baptists of Armenia. But it was often delayed until the deathbed, for the primitive idea that mortal sins committed after baptism were sins against the Holy Spirit and unforgivable, still influenced men, and survived among the Cathars up to the 14th century. The fathers, however, of the 4th century emphasized already the danger of deferring the rite until men fall into mortal sickness, when they may be unconscious or paralysed or otherwise unable to profess their faith and repentance, or to swallow the viaticum. Gregory Theologus therefore (c. 340) suggests the age of three years as suitable for baptism, because by then a child is old enough, if not to understand the questions put to him, at any rate to speak and make the necessary responses. Gregory sanctions the baptism of infants only where there is imminent danger of death. "It is better that they should be sanctified without their own sense of it than that they pass away unsealed and uninitiated." And he justifies his view by this, that circumcision, which foreshadowed the Christian seal $(\sigma\phi\rho\alpha\gamma(\varsigma)$, was imposed on the eighth day on those who as yet had no use of reason. He also urges the analogue of "the anointing of the doorposts, which preserved the first-born by things that have no sense." On such grounds was justified the transition of a baptism which began as a spontaneous act of self-consecration into an opus operatum. How long after this it was before infant baptism became normal inside the Byzantine church, we do not exactly know, but it was natural that mothers should insist on their children being liberated from Satan and safeguarded from demons as soon as might be. The change came more quickly in Latin than in Greek Christendom, and very slowly indeed in the Armenian and Georgian churches. Augustine's insistence on original sin, a doctrine never quite accepted in his

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sense in the East, hurried on the change.

- 7. Confirmation.—In the West, however, the sacrament has been saved from becoming merely magical by the rite of confirmation or of reception of the Spirit being separated from the baptism of regeneration and reserved for an adult age. The English church confirms at fifteen or sixteen; the Roman rather earlier. The catechetic course, which formerly preceded the complete rite, now intervenes between its two halves; and the sponsors who formerly attested the worthiness of the candidate and received him up as anadochi out of the font, have become god-parents, who take the baptismal vows vicariously for infants who cannot answer for themselves. In the East, on the contrary, the complete rite is read over the child, who is thus confirmed from the first. The Roman church already foreshadowed the change and gave a peculiar salience to confirmation as early as the 3rd century, when it decreed that persons already baptized by heretics, but reverting to the church should not be baptized over again, but only have hands laid on them. It was otherwise in Africa and the East. Here they insisted in such cases on a repetition of the entire rite, baptism and confirmation together. The Cathars (q.v.) of the middle ages discarded water baptism altogether as being a Jewish rite, but retained the laying on of hands with the traditio precis as sufficient initiation. This they called the spiritual baptism, and interpreted Matt. xxviii. 19, as a command to practise it, and not water baptism.
- 8. Disciplina arcani.—The communication to the candidates of the Creed and Lord's Prayer was a solemn rite. Cyril of Jerusalem, in his instruction of the catechumens, urges them to learn the Creed by heart, but not write it down. On no account must they divulge it to unbaptized persons. The same rule already meets us in Clement of Alexandria before the year 200. In time this rule gave rise to what is called the Disciplina arcani. Following the fashion of the pagan mysteries in which men were only permitted to gaze upon the sacred objects after minute lustrations and scrupulous purifications, Christian teachers came to represent the Creed, Lord's Prayer and Lord's Supper as mysteries to be guarded in silence and never divulged either to the unbaptized or to the pagans. And yet Justin Martyr, Tertullian and other apologists of the 2nd century had found nothing to conceal from the eye and ear of pagan emperors and their ministers. In the 3rd century this love of mystification reached the pitch of hiding even the gospels from the unclean eyes of pagans. Probably Mgr. Pierre Battifol is correct in supposing that the Disciplina arcani was more or less of a make-believe, a bit of belletristic trifling on the part of the over-rhetorical Fathers of the 4th and 5th centuries. [3] It is in them that the atmosphere of mystery attains a maximum of intensity. They clearly felt themselves called upon to out-trump the pagan Mystae. Yet it is inconceivable that men and women should spend years, even whole lives, as catechumens within the pale of the church, and really remain ignorant all the time of the Trinitarian Epiclesis used in baptism, of the Creed, and above all of the Lord's Prayer. Wherever

the *Disciplina arcani, i.e.* the obligation to keep secret the formula of the threefold name, the creed based on it and the Lord's Prayer, was taken seriously, it was akin to the scruple which exists everywhere among primitive religionists against revealing to the profane the knowledge of a powerful name or magic formula. The name of a deity was often kept secret and not allowed to be written down, as among the Jews.

- 9. Regeneration.—The idea of regeneration seldom occurs in the New Testament, and perhaps not at all in connexion with baptism; for in the conversation with Nicodemus, John iii. 3-8, the words "of water and" in v. 5 offend the context, spiritual re-birth alone being insisted upon in vv. 3, 6, 7 and 8; moreover, Justin Martyr, who cites v. 5, seems to omit them. Nor is there any mention of water in ch. i. 13, where, according to the oldest text, Christ is represented as having been born or begotten not of blood, nor of the will of the flesh, nor of the will of man, but of God.
- In 1 Pet. i. 3, it is said of the saints that God the Father begat them anew unto a living hope by the resurrection of Jesus, and in v. 23 that they have been begotten again, not of corruptible seed, but of incorruptible through the word of God. But here again it is not clear that the writer has in view water baptism or any rite at all as the means and occasion of regeneration. In the conversation with Nicodemus we seem to overhear a protest against the growing tendency of the last years of the 1st century to substitute formal sacraments for the free afflatus of the spirit, and to "crib, cabin and confine" the gift of prophecy.

The passage where re-birth is best put forward in connexion with baptism is Luke iii. 22, where ancient texts, including the *Gospel of the Hebrews*, read, "Thou art my beloved Son, this day have I begotten Thee." These words were taken in the sense that Jesus was then re-born of the Spirit an adoptive Son of God and Messiah; and with this reading is bound up the entire adoptionist school of Christology. It apparently underlies the symbolizing of Christ as a fish in the art of the catacombs, and in the literature of the 2nd century. Tertullian prefaces with this idea his work on baptism. *Nos pisciculi secundum* IXOYN *nostrum Jesum Christum in aqua nascimur*. "We little fishes, after the example of our *Fish* Jesus Christ, are *born* in the water." So about the year 440 the Gaulish poet Orientius wrote of Christ; *Piscis natus aquis, auctor baptismatis ipse est.* "A fish born of the waters is himself originator of baptism."

But before his time and within a hundred years of Tertullian this symbolism in its original significance had become heretical, and the orthodox were thrown back on another explanation of it. This was that the word $IX\Theta Y\Sigma$ is made up of the letters which begin the Greek words meaning "Jesus Christ, Son of God, Saviour." An entire mythology soon grew up around the idea of rebirth. The font was viewed as the womb of the virgin mother church, who was in some congregations, for example, in the early churches of Gaul, no abstraction, but a divine aeon watching over and sympathizing with the children of her womb, the recipient even of hymns of praise and humble supplications. Other mythoplastic growths succeeded, one of which must be noticed. The sponsors or *anadochi*, who, after the introduction of infant baptism came to be called god-fathers and god-mothers, were really in a spiritual relation to the children they took up out of the font. This relation was soon by the canonists identified with the blood-tie which connects real parents with their offspring, and the corollary drawn that children, who in baptism had the same god-parent, were real brothers and sisters, who might not marry either each the other or real children of the said god-parent. The reformed churches have set aside this fiction, but in the Latin and Eastern churches it has created a distinct and very powerful marriage taboo.

10. Relation to Repentance.—Baptism justified the believer, that is to say, constituted him a saint whose past sins were abolished. Sin after baptism excluded the sinner afresh from the divine grace and from the sacraments. He fell back into the status of a catechumen, and it was much discussed from the 2nd century onwards whether he could be restored to the church at all, and, if so, how. A rite was devised, called *exhomologesis*, by which, after a fresh term of repentance, marked by austerities more strict than any Trappist monk imposes on himself to-day, the persons lapsed from grace could re-enter the church. In effect this rite was a repetition of baptism, the water of the font alone being omitted. Such restoration could in the earlier church only be effected once. A second lapse from the state of grace entailed perpetual exclusion from the sacraments, the means of salvation. As has been remarked above, the terror of post-baptismal sin and the fact that only one restoration was allowable influenced many as late as the 4th century to remain catechumens all their lives, and, like Constantine, to receive baptism on the deathbed alone. The same scruples endured among the medieval Cathars. (See Penance and Novatianus.)

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11. Baptism for the Dead.—Paul, in 1 Cor. xv. 29, glances at this as an established practice familiar to those whom he addresses. Three explanations are possible: (1) The saints before they were quickened or made alive together with Christ, were dead through their trespasses and sins. In baptism they were buried with Christ and rose, like Him, from the dead. We can, therefore, paraphrase v. 29 thus: "Else what shall they do which are baptized for their dead selves?" &c. It is in behalf of his own sinful, i.e. dead self, that the sinner is baptized and receives eternal life. (2) Contact with the dead entailed a pollution which lasted at least a day and must be washed away by ablutions, before a man is re-admitted to religious cult. This was the rule among the Jews. Is it possible that the words "for the dead" signify "because of contact with the dead"? (3) Both these explanations are forced, and it is more probable that by a make-believe common in all religions, and not unknown in the earliest church, the sins of dead relatives, about whose salvation their survivors were anxious, were transferred into living persons, who assumed for the nonce their names and were baptized in their behalf, so in vicarious wise rendering it possible for the sins of the dead to be washed away. The Mormons have this rite. The idea of transferring sin into another man or into an animal, and so getting it purged through him or it, was widespread in

the age of Paul and long afterwards. Chrysostom says that the substitutes were put into the beds of the deceased, and assuming the voice of the dead asked for baptism and remission of sins. Tertullian and others attest this custom among the followers of Cerinthus and Marcion.

12. Use of the Name.—In Acts iv. 7, the rulers and priests of the Jews summon Peter and inquire by what power or in what name he has healed the lame. Here a belief is assumed which pervades ancient magic and religion. Only so far as we can get away from the modern view that a person's name is a trifling accident, and breathe the atmosphere which broods over ancient religions, can we understand the use of the name in baptisms, exorcisms, prayers, purifications and consecrations. For a name carried with it, for those who were so blessed as to be acquainted with it, whatever power and influence its owner wielded in heaven or on earth or under the earth. A vow or prayer formulated in or through a certain name was fraught with the prestige of him whose name it was. Thus the psalmist addressing Jehovah cries (Ps. liv. 1): "Save me, O God, by Thy name, and judge me in Thy might." And in Acts iii. 16, it is the name itself which renders strong and whole the man who believed therein. In Acts xviii. 15, the Jews assail Paul because he has trusted and appealed to the name of a Messiah whom they regard as an overthrower of the law; for Paul believed that God had invested Jesus with a name above all names, potent to constrain and overcome all lesser powers, good or evil, in heaven or earth or under earth. Baptism then in the name or through the name or into the name of Christ placed the believer under the influence and tutelage of Christ's personality, as before he was in popular estimation under the influence of stars and horoscope. Nay, more, it imported that personality into him, making him a limb or member of Christ's body, and immortal as Christ was immortal. Nearly all the passages in which the word *name* is used in the New Testament become more intelligible if it be rendered personality. In Rev. xi. 13, the revisers are obliged to render it by persons, and should equally have done so in iii. 4: "Thou hast a few names (i.e. persons) in Sardis which did not defile their garments." (See Consecration.)

13. Origin of Christian Baptism.—When it is asked, Was this a continuance of the baptism of John or was it merely the baptism of proselytes?—a distinction is implied between the two latter which was not always real. In relation to the publicans and soldiers who, smitten with remorse, sought out John in the wilderness, his baptism was a purification from their past and so far identical with the proselyte's bath; but so far as it raised them up to be children unto Abraham and filled them with the Messianic hope, it advanced them further than that bath could do, and assured them of a place in the kingdom of God, soon to be established—this, without imposing circumcision on them; for the ordinary proselyte was circumcised as well as baptized. For the Jews, however, who came to John, his baptism could not have the significance of the proselyte's baptism, but rather accorded with another baptism undergone by Jews who wished to consecrate their lives by stricter study and practice of the law. So Epictetus remarks that he only really understands Judaism who knows "the baptized Jew" (τὸν βεβαμμένον). We gather from Acts xix. 4, that John had merely baptized in the name of the coming Messiah, without identifying him with Jesus of Nazareth. The apostolic age supplied this identification, and the normal use during it seems to have been "into Christ Jesus," or "in the name of the Lord Jesus Christ," or "of Jesus Christ" simply, or "of the Lord Jesus Christ." Paul explains these formulas as being equivalent to "into the death of Christ Jesus," as if the faithful were in the rite raised from death into everlasting life. The likeness of the baptismal ceremony with Christ's death and resurrection ensured a real union with him of the believer who underwent the ceremony, according to the well-known principle in sacris simulata pro veris accipi.

But opinion was still fluid about baptism in the apostolic age, especially as to its connexion with the descent of the Spirit. The Spirit falls on the disciples and others at Pentecost without any baptism at all, and Paul alone of the apostles was baptized. So far was the afflatus of the Spirit from being conditioned by the rite, that in Acts x. 44 ff., the gift of the Spirit was first poured out upon the Gentiles who heard the word preached so that they spoke with tongues, and it was only after these manifestations that they were baptized with water in the name of Jesus Christ at the instance of Peter. We can divine from this passage why Paul was so eager himself to preach the word, and left it to others to baptize.

But as a rule the repentant underwent baptism in the name of Christ Jesus, and washed away their sins before hands were laid upon them unto reception of the Spirit. Apollos, who only knew the baptism of John (Acts xviii. 24), needed only instruction in the prophetic *gnosis* at the hands of Priscilla and Aquila in order to become a full disciple. On the other hand, in Acts xix. 1-7, twelve disciples, for such they were already accounted, who had been baptized into John's baptism, i.e. into the name of him that should follow John, but had not even heard of the Holy Spirit, are at Paul's instance re-baptized into the name of the Lord Jesus. Then Paul himself lays hands on them and the Holy Ghost comes upon them, so that they speak with tongues and prophecy. Not only do we hear of these varieties of practice, but also of the laying on of hands together with prayer as a substantive rite unconnected with baptism. The seven deacons were so ordained. And this rite of laying on hands, which was in antiquity a recognized way of transmitting the occult power or virtue of one man into another, is used in Acts ix. 17, by Ananias, in order that Paul may recover his sight and be filled with the Holy Ghost. Saul and Barnabas equally are separated for a certain missionary work by imposition of hands with prayer and fasting, and are so sent forth by the Holy Ghost. It was also a way of healing the sick (Acts xxviii. 8), and as such accompanied by anointing with oil (Jas. v. 14). The Roman church then had early precedents for separating confirmation from baptism. It would also appear that in the primitive age confirmation and ordination were one and the same rite; and so they continued to be among the dissident believers of the middle ages, who, however, often dropped the water rite

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The question arises whether Jesus Himself instituted baptism as a condition of entry into the Messianic kingdom. The fourth gospel (iii. 22, and iv. 1) asserts that Jesus Himself baptized on a greater scale than the Baptist, but immediately adds that Jesus Himself baptized not, but only His disciples, as if the writer felt that he had too boldly contradicted the older tradition of the other gospels. Nor in these is it recorded that the disciples baptized during their Master's lifetime; indeed the very contrary is implied. There remain two texts in which the injunction to baptize is attributed to Jesus, namely, Mark xvi. 16 and Matt. xxviii. 18-20. Of these the first is part of an appendix headed "of Ariston the elder" in an old Armenian codex, and taken perhaps from the lost compilations of Papias; as to the other text, it has been doubted by many critics, e.g. Neander, Harnack, Dr Armitage Robinson and James Martineau, whether it represents a real utterance of Christ and not rather the liturgical usage of the region in which the first gospel was compiled. The circumstance, unknown to these critics when they made their conjectures, that Eusebius Pamphili, in nearly a score of citations, substitutes the words "in My Name" for the words "baptizing them into the name of the Father and of the Son and of the Holy Ghost," renders their conjectures superfluous. Aphraates also in citing the verse substitutes "and they shall believe in Me"—a paraphrase of "in My Name." The first gospel thus falls into line with the rest of the New Testament.

14. Analogous Rites in other Religions (see also Purification).—The Fathers themselves were the first to recognize that "the devil too had his sacraments," and that the Eleusinian, Isiac, Mithraic and other *mystae* used baptism in their rites of initiation. But it is not to be supposed that the Christians borrowed from these or from any Gentile source any essential features of their baptismal rites. Baptism was long before the advent of Jesus imposed on proselytes, and existed inside Judaism itself.

It has been remarked that the developed ceremony of baptism, with its threefold renunciation, resembles the ceremony of Roman law known as emancipatio, by which the patria potestas (or power of life and death of the father over his son) was extinguished. Under the law of the XII. Tables the father lost it, if he three times sold his child. This suggested a regular procedure, according to which the father sold his son thrice into mancipium, while after each sale the fictitious vendee enfranchized the son, by manumissio vindicta, i.e. by laying his rod (vindicta) on the slave and claiming him as free (vindicatio in libertatem). Then the owner also laid his rod on the slave, declaring his intention to enfranchise him, and the praetor by his addictor confirmed the owner's declaration. The third *manumission* thus gave to the son and slave his freedom. It is possible that this common ceremony of Roman law suggested the triple abrenunciatio of Satan. Like the legal ceremony, baptism freed the believer from one (Satan) who, by the mere fact of the believer's birth, had power of death over him. And as the legal manumission dissolved a son's previous agnatic relationships, so, too, the person baptized gave up father and mother, &c., and became one of a society of brethren the bond between whom was not physical but spiritual. The idea of adoption in baptism as a son and heir of God was almost certainly taken by Paul from Roman law.

The ceremony of turning to the west three times with renunciation of the Evil One, then to the east, is exactly paralleled in a rite of purification by water common among the Malays and described by Skeat in his book on Malay magic. If the Malay rite is not derived through Mahommedanism from Christianity, it is a remarkable example of how similar psychological conditions can produce almost identical rites.

The idea of spiritual re-birth, so soon associated with baptism, was of wide currency in ancient religions. It is met with in Philo of Alexandria and was familiar to the Jews. Thus the proselyte is said in the Talmud to resemble a child and must bathe in the name of God. The Jordan is declared in 2 Kings v. 10 to be a cleansing medium, and Naaman's cure was held to pre-figure Christian baptism. Jerome relates that the Jew who taught him Hebrew communicated to him a teaching of the Rabbi Baraciba, that the inner man who rises up in us at the fourteenth year after puberty (i.e. at 29) is better than the man who is born from the mother's womb.

In a Paris papyrus edited by Albr. Dieterich (Leipzig, 1903) under the title of *Eine Mithrasliturgie*, an ancient mystic describes his re-birth in impressive language. In a prayer addressed to "First birth of my birth, first beginning (*or* principle) of my beginning, first spirit of the spirit in me," he prays "to be restored to his deathless birth (*genesis*), albeit he is let and hindered by his underlying nature, to the end that according to the pressing need and spur of his longing he may gaze upon the deathless principle with deathless spirit, through the deathless water, through the solid and the air; that he may be re-born through reason (*or* idea), that he may be consecrated, and the holy spirit breathe in him, that he may admire the holy fire, that he may behold the abyss of the Orient, dread water, and that he may be heard of the quickening and circumambient ether; for this day he is about to gaze on the revealed reality with deathless eyes; a mortal born of mortal womb, he has been enhanced in excellence by the might of the Allpowerful and by the right hand of the Deathless one," &c.

This is but one specimen of the pious ejaculations, which in the first centuries were rising from the lips of thousands of *mystae*, in Egypt, Asia Minor, Italy and elsewhere. The idea of re-birth was in the air; it was the very keynote of all the solemn initiations and mysteries—Mythraic, Orphic, Eleusinian—through which repentant pagans secured pardon and eternal bliss. Yet there is not much evidence that the church directly borrowed many of its ceremonies or interpretations from outside sources. They for the most part originated among the believers, and not improbably the outside cults borrowed as much from the church as it from them.

Authorities.—The following ancient works are recommended: Tertullian, De Baptismo (edition with introd. J. M. Lupton, 1909); Cyril of Jerusalem, Catecheses; Basil, De Spiritu Sancto; Constitutiones Apostolicae; Gregory Nazianzen, Orat. 40; Gregory Nyss., Oratio in eos qui different baptismum; Sacramentary of Serapion of Thmuis; Augustine, De Baptismo contra Donatistas; Jac. Goar, Rituale Graecorum (gives the current Greek rites); F. C. Conybeare, Rituale Armenorum (the oldest forms of Armenian and Greek rites); Gerard G. Vossius, De Baptismo (Amsterdam, 1648); Edmond Martene, De Ant. Ecclesiae Ritibus (gives Western rites) (Bassani, 1788). The modern literature is infinite; perhaps the most exhaustive works are W. F. Höfling, Das Sacrament der Taufe (Erlangen, 1859): Jos. Bingham's Antiquities (London, 1834), and W. Wall, On Infant Baptism (London, 1707); J. Anrich, Das antike Mysterienwesen (Göttingen, 1894), details the corresponding rites of the Greek mysteries, also A. Dieterich, Eine Mithras Liturgie (Leipzig, 1903); J. C. Suicer, Thesaurus, sub voce βάπτισμα; Ad. Harnack, Dogmengeschichte (Freiburg im Br. 1894); L. Duchesne, Origines du culte chrétien (Paris, 1898); Mgr. P. Batiffol, Etudes historiques (Paris, 1904); J. C. W. Augusti, Denkwürdigkeiten (Leipzig, 1829-1831); Monumenta Ecclesiae Liturgica by Dom Cabrol and Dom Leclercq (Paris, 1902) (a summary of all liturgical passages given in the early Fathers); Corblet, Histoire du sacrement de baptême (2 vols. Paris, 1881-1882).

(F. C. C.)

- [1] James Darmesteter, in "Introd. to the Vendidad," in the Sacred Books of the East.
- [2] Rogers' essay on Baptism and Christian Archaeology in Studia Biblica, vol. v.
- [3] Études historiques, Essai sur Disc. arc. (Paris 1902).

BAPTISTE, NICOLAS ANSELME (1761-1835), French actor, was born in Bordeaux on the 18th of June 1761, the elder son of Joseph François Anselme, a popular actor. His mother played leading parts in tragedy, and both his parents enjoyed the protection of Voltaire and the friendship of Lekain. It was probably under the auspices of the latter that Nicolas Anselme made his first appearance as de Belloy in Gaston et Bayard; and shortly afterwards, under the name of Baptiste, he made a contract to play young lover parts at Arras, where he also appeared in opera and even in pantomime. From Rouen, where he had three successful years, his reputation spread to Paris and he was summoned to the new theatre which the comedian Langlois-Courcelles had just founded, and where he succeeded, not only in making an engagement for himself, but in bringing all his family, father, mother, wife and brother. They were thus distinguished in the playbills: Baptiste, aîné, Baptiste père, Baptiste cadet, Madame Baptiste mère, Madame Baptiste bru. This resulted in the pun of calling a play in which they all appeared une pièce de baptistes. Nicolas soon obtained the public favour, specially in La Martellière's mediocre Robert, chef de brigands, and as Count Almaviva, in Beaumarchais' La Mère coupable. His success in this was so great that the directors of the Théâtre de la République-who had already secured Talma, Dugazon and Madame Vestris-hastened to obtain his services, and, in order to get him at once (1793), paid the 20,000 francs forfeit which he was obliged to surrender on breaking his contract. Later he, as well as his younger brother, became sociétaire. Nicolas took all the leading parts in comedy and tragedy. As he grew older his special forte lay in noble fathers. After a brilliant career of thirty-five years of uninterrupted service, he retired in 1828. But, after the revolution of 1830, when the Théâtre Français was in great straits, the brothers Baptiste came to the rescue, reappeared on the stage and helped to bring back its prosperity. The elder died in Paris on the 1st of December 1835. The younger brother, Paul Eustache Anselme, known as Baptiste cadet (1765-1839), was also a comedian of great talent, and had a long and brilliant career at the Comédie Française, where he made his début in 1792 in L'Amour et l'intérêt.

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BAPTISTERY (Baptisterium, in the Greek Church φωτιστήριον), the separate hall or chapel, connected with the early Christian Church, in which the catechumens were instructed and the sacrament of baptism administered. The name baptistery is also given to a kind of chapel in a large church, which serves the same purpose. The baptistery proper was commonly a circular building, although sometimes it had eight and sometimes twelve sides, and consisted of an anteroom (προαύλιος οἶκος) where the catechumens were instructed, and where before baptism they made their confession of faith, and an inner apartment where the sacrament was administered. In the inner apartment the principal object was the baptismal font (κολυμβήθρα, or piscina), in which those to be baptized were immersed thrice. Three steps led down to the floor of the font, and over it was suspended a gold or silver dove; while on the walls were commonly pictures of the scenes in the life of John the Baptist. The font was at first always of stone, but latterly metals were often used. Baptisteries belong to a period of the church when great numbers of adult catechumens were baptized, and when immersion was the rule. We find little or no trace of them before Constantine made Christianity the state religion, i.e. before the 4th century; and as early as the 6th century the baptismal font was built in the porch of the church and then in the church itself. After the 9th century few baptisteries were built, the most noteworthy of later date being those at Pisa, Florence, Padua, Lucca and Parma. Some of the older baptisteries were very large,

so large that we hear of councils and synods being held in them. It was necessary to make them large, because in the early Church it was customary for the bishop to baptize all the catechumens in his diocese (and so baptisteries are commonly found attached to the cathedral and not to the parish churches), and also because the rite was performed only thrice in the year. (See Baptism.) During the months when there were no baptisms the baptistery doors were sealed with the bishop's seal. Some baptisteries were divided into two parts to separate the sexes; sometimes the church had two baptisteries, one for each sex. A fireplace was often provided to warm the neophytes after immersion. Though baptisteries were forbidden to be used as burial-places by the council of Auxerre (578) they were not uncommonly used as such. Many of the early archbishops of Canterbury were buried in the baptistery there. Baptisteries, we find from the records of early councils, were first built and used to correct the evils arising from the practice of private baptism. As soon as Christianity made such progress that baptism became the rule, and as soon as immersion gave place to sprinkling, the ancient baptisteries were no longer necessary. They are still in general use, however, in Florence and Pisa. The baptistery of the Lateran must be the earliest ecclesiastical building still in use. A large part of it remains as built by Constantine. The central area, where is the basin of the font, is an octagon around which stand eight porphyry columns, with marble capitals and entablature of classical form; outside these are an ambulatory and outer walls forming a larger octagon. Attached to one side, towards the Lateran basilica, is a fine porch with two noble porphyry columns and richly carved capitals, bases and entablatures. The circular church of Santa Costanza, also of the 4th century, served as a baptistery and contained the tomb of the daughter of Constantine. This is a remarkably perfect structure with a central dome, columns and mosaics of classical fashion. Two side niches contain the earliest known mosaics of distinctively Christian subjects. In one is represented Moses receiving the Old Law, in the other Christ delivers to St Peter the New Law-a charter sealed with the X P monogram.

Another baptistery of the earliest times has recently been excavated at Aquileia. Ruins of an early baptistery have also been found at Salona. At Ravenna exist two famous baptisteries encrusted with fine mosaics, one of them built in the middle of the 5th century, and the other in the 6th. To the latter date also belongs a large baptistery decorated with mosaics at Naples.

In the East the metropolitan baptistery at Constantinople still stands at the side of the mosque which was once the patriarchal church of St Sophia; and many others, in Syria, have been made known to us by recent researches, as also have some belonging to the churches of North Africa. In France the most famous early baptistery is St Jean at Poitiers, and other early examples exist at Riez, Fréjus and Aix. In England, a detached baptistery is known to have been associated with the cathedral of Canterbury.

See Hefele's *Concilien, passim*; Du Cange, *Glossary*, article "Baptisterium"; Eusebius, *Hist. Eccl.* x. 4; Bingham's *Antiquities of the Christian Church*, book xi.

(W. R. L.)

BAPTISTS, a body of Christians, distinguished, as their name imports, from other denominations by the view they hold respecting the ordinance of baptism (q.v.). This distinctive view, common and peculiar to all Baptists, is that baptism should be administered to believers only. The mode of administration of the ordinance has not always been the same, and some Baptists (e.g.) the Mennonites) still practise baptism by pouring or sprinkling, but among those who will here be styled modern Baptists, the mode of administration is also distinctive, to wit, immersion. It should, however, be borne in mind that immersion is not peculiar to the modern Baptists. It has always been recognized by Paedobaptists as a legitimate mode, and is still practised to the exclusion of other modes by a very large proportion of paedobaptist Christendom (e.g.) the Orthodox Eastern Church). We shall distinguish here between two main groups of Baptists in Europe; the Anabaptists, now practically extinct, and the modern Baptists whose churches are in nearly every European country and in all other countries where white men reside.

I. The Anabaptists

The great spiritual movement of the 15th and 16th centuries had for its most general characteristic, revolt against authority. This showed itself not merely in the anti-papal reformation of Luther, but also in the anti-feudal rising of the peasants and in a variety of antiecclesiastical movements within the reformation areas themselves. One of the most notable of these radical anti-ecclesiastical movements was that of the Zwickau prophets, (Marcus Stübner, Nikolaus Storch and Thomas Münzer): the most vigorous and notorious that of the Münster Anabaptists. Although they have been called the "harbingers" of the Anabaptists, the characteristic teaching of the Zwickau prophets was not Anabaptism. (See, however, Anabaptists.) For although Münzer repudiated infant baptism in theory, he did not relinquish its practice, nor did he insist on the re-baptism of believers. The characteristic teaching of the Zwickau movement, so closely linked with the peasant rising, was the great emphasis laid upon the "inner word." Divine revelation, said Münzer, was not received from the church, nor from preaching, least of all from the dead letter of the Bible; it was received solely and directly from the Spirit of God. It is this daring faith in divine illumination that brings the Zwickau teachers most nearly into touch with the Anabaptists. But if they are not typical of Anabaptism, still less are the later representatives of the movement in the last sad months at Münster.

communism of goods, and asserted that Christians must always exercise love and patience towards each other and so be independent of worldly tribunals. But their most radical doctrine was the rejection of infant baptism as unscriptural. They rapidly gained adherents, among whom was Hans Brödli, pastor of Zollikon. Their refusal, however, to baptize infants, and the formation of a separate church as the outcome of this refusal, brought upon them the condemnation of Zwingli, and a number of them were banished. This act of banishment, however, drove Jörg Blaurock, Konrad Grebel and others to take the step which definitely instituted "Anabaptism": they baptized one another and then partook of the Lord's Supper together. This step took them much farther than the repudiation of paedobaptism. It formed a new religious community, which sought to fashion itself on the model of primitive Christianity, rejecting all tradition and accretions later than New Testament records. Its members claimed to get back to the simple church founded on brotherly love. The result was that their numbers grew with astonishing rapidity, and scholarly saints like Balthasar Hubmaier (ca. 1480-1528) and Hans Denck (ca. 1495-1527) joined them. Hubmaier brought no new adherents with him, and in 1525 himself baptized 300 converts. This baptism, however, was not immersion. Blaurock and Grebel baptized each other, and many adherents, kneeling together in an ordinary room. Hubmaier baptized his 300 from one bucket. The mode was sprinkling or pouring. In all this the Anabaptists had maintained one central article of faith that linked them to the Zwickau prophets, belief in conscience, religious feeling, or inner light, as the sole true beginning or ground of religion; and one other article, held with equal vigour and sincerity, that true Christians are like sheep among wolves, and must on no account defend themselves from their enemies or take vengeance for wrong done. Very soon this their faith was put to fiery test. Not only were Catholics and Protestants opposed to them on doctrinal grounds, but the secular powers, fearing that the new teaching was potentially as revolutionary as Münzer's radicalism had been, soon instituted a persecution of the Anabaptists. On the 7th of March 1526 the Zürich Rath issued an edict threatening all who were baptized anew with death by drowning, and in 1529 the emperor Charles V., at the diet of Spires, ordered Anabaptists to be put to death with fire and sword without even the form of ecclesiastical trial. A cruel persecution arose. Manz was drowned at Zürich and Michael Sattler (ca. 1495-1527) burned to death after torture in 1527; Hubmaier was burned in 1528 and Blaurock in 1529, and Sebastian Franck (1499-1542) asserts that the number of slain was in 1530 already about 2000.

and proposed to form a separate church. They repudiated the use of force, advocated a scriptural

Two results followed from this persecution. First, the development of a self-contained and homogeneous community was made impossible. No opportunity for the adoption of any common confession was given. Only a few great doctrines are seen to have been generally held by Anabaptists—such as the baptism of believers only, the rejection of the Lutheran doctrine of justification by faith as onesided and the simple practice of the breaking of bread. This last, the Anabaptist doctrine of the Lord's Supper, was to the effect that brothers and sisters in Christ should partake in remembrance of the death of Christ, and that they should thereby renew the bond of brotherly love as the basis of neighbourly life. In the second place, the persecution deprived the Anabaptists of the noble leaders who had preached non-resistance and at the same time provoked others to an attitude of vengeance which culminated in the horrors of Münster. For Melchior Hofmann (ca. 1498-1543 or 1544) having taken the Anabaptist teaching to Holland, there arose in Haarlem a preacher of vengeance, Jan Matthisson or Matthyszoon (Matthys) (d. 1534) by name, who, prophesying a speedy end of the world and establishment of the kingdom of heaven, obtained many adherents, and despatched Boekebinder and de Kniper to Münster. Here the attempt was made to realise Matthisson's ideals. All who did not embrace Anabaptism were driven from Münster (1533), and Bernt Knipperdolling (ca. 1495-1536) became burgomaster. The town was now besieged and Matthisson was killed early in 1534. John (Johann Bockelson) of Leiden (1510-1536) took his place and the town became the scene of the grossest licence and cruelty, until in 1535 it was taken by the besieging bishop. Unhappily the Anabaptists have always been remembered by the crimes of John of Leiden and the revelry of Münster. They should really be known by the teaching and martyrdom of Blaurock, Grebel and Hubmaier, and by the gentle learning and piety of Hans Denck-of whom, with many hundred others, "the world was not worthy."

For the teaching of the Anabaptists, see ANABAPTISTS.

Reference has already been made to the reason why a common Anabaptist confession was never made public. Probably, however, the earliest confession of faith of any Baptist community is that given by Zwingli in the second part of his Elenchus contra Catabaptistas, published in 1527. Zwingli professes to give it entire, translating it, as he says, ad verbum into Latin. Whatever opinion may be held as to the orthodoxy of the seven articles of the Anabaptists, the vehemence with which they were opposed, and the epithets of abuse which were heaped upon the unfortunate sect that maintained them, cannot fail to astonish those used to toleration. Zwingli, who details these articles, as he says, that the world may see that they are "fanatical, stolid, audacious, impious," can scarcely be acquitted of unfairness in joining together two of them,—the fourth and fifth,—thus making the article treat "of the avoiding of abominable pastors in the church" (Super devitatione abominabilium pastorum in Ecclesia), though there is nothing about pastors in the fourth article, and nothing about abominations in the fifth, and though in a marginal note he himself explains that the first two copies that were sent him read as he does, but the other copies make two articles, as in fact they evidently are. It is strange that the Protestant Council of Zürich, which had scarcely won its own liberty, and was still in dread of the persecution of the Romanists, should pass the decree which instituted the cruel persecution of the Anabaptists.

After Münster had fallen the harassed remnants of the Anabaptists were gathered together under Menno Simonis, who joined them in 1537. His moderation and piety held in check the turbulence of the more fanatical amongst them. He died in 1561 after a life passed amidst continual dangers and conflicts. His name remains as the designation of the Mennonites (q.v.), who eventually settled in the Netherlands under the protection of William the Silent, prince of Orange.

Of the introduction of Anabaptist views into England we have no certain knowledge. Fox relates that "the registers of London make mention of certain Dutchmen counted for Anabaptists, of whom ten were put to death in sundry places in the realm, anno 1535; other ten repented and were saved." In 1536 King Henry VIII. issued a proclamation together with articles concerning faith agreed upon by Convocation, in which the clergy are told to instruct the people that they ought to repute and take "the Anabaptists' opinions for detestable heresies and to be utterly condemned." Thomas Fuller (1608-1661) tells us from Stow's Chronicles that, in the year 1538, "four Anabaptists, three men and one woman, all Dutch, bare faggots at Paul's Cross, and three days after a man and woman of their sect was burnt in Smithfield." In the reign of Edward VI., after the return of the exiles from Zürich, John Hooper (bishop of Gloucester and Worcester, d. 1555) writes to his friend Bullinger in 1549, that he reads "a public lecture twice in the day to so numerous an audience that the church cannot contain them," and adds, "the Anabaptists flock to the place and give me much trouble." It would seem that at this time they were united together in communities separate from the established Church. Latimer, in 1552, speaks of them as segregating themselves from the company of other men. In the sixth examination of John Philpot (1516-1555) in 1555 we are told that Lord Riche said to him, "All heretics do boast of the Spirit of God, and every one would have a church by himself, as Joan of Kent and the Anabaptists." Philpot was imprisoned soon after Mary's accession in 1553; and it is very pleasing to find, amidst the records of intense bitterness and rancour which characterized these times, and with which Romanist and Protestant alike assailed the persecuted Anabaptists, a letter of Philpot's, to a friend of his, "prisoner the same time in Newgate," who held the condemned opinions. His friend had written to ask his judgment concerning the baptism of infants. Philpot in a long reply, whilst maintaining the obligation of infant baptism, yet addresses his correspondent as, "dear brother, saint, and fellow-prisoner for the truth of Christ's gospel"; and at the close of his argument he says, "I beseech thee, dear brother in the gospel, follow the steps of the faith of the glorious martyrs in the primitive church, and of such as at this day follow the same."

Many Anabaptist communities existed in England toward the end of the 16th century, particularly in East Anglia, Kent and London. Their most notable representative was Robert Cooke, but they were more notorious for heretical views as to the Virgin Mary (see Anabaptists) than for their antipaedobaptist position. It was for these views that Joan Boucher of Kent was burnt in 1550. There is no doubt that these prepared the way for the coming of the modern Baptists, but "the truth is that, while the Anabaptists in England raised the question of baptism, they were almost entirely a foreign importation, an alien element; and the rise of the Baptist churches was wholly independent of them."

II. THE MODERN BAPTISTS

1. Great Britain and Ireland.—If the Anabaptists of England were not the progenitors of the modern Baptist church, we must look abroad for the beginnings of that movement. Although there were doubtless many who held Baptist views scattered among the Independent communities, it was not until the time of John Smith or Smyth (d. 1612) that the modern Baptist movement in England broke away from Brownism. Smyth was appointed preacher of the city of Lincoln in 1600 as an ordained clergyman, but became a separatist in 1605 or 1606, and, soon after, emigrated under stress of persecution with the Gainsborough Independents to Amsterdam. With Thomas Helwys (ca. 1560-ca. 1616) and Morton he joined the "Ancient" church there, but, coming under Mennonite teaching in 1609, he separated from the Independents, baptized himself (hence he is called the "Se-baptist"), Helwys and others probably according to the Anabaptist or Mennonite fashion of pouring. These then formed the first English Baptist Church which in 1611 published "a declaration of faith of English people remaining at Amsterdam in Holland." The article relating to baptism is as follows:—"That every church is to receive in all their members by baptism upon the confession of their faith and sins, wrought by the preaching of the gospel according to the primitive institution and practice. And therefore churches constituted after any other manner, or of any other persons, are not according to Christ's testament. That baptism or washing with water is the outward manifestation of dying unto sin and walking in newness of life; and therefore in no wise appertaineth to infants." They held "that no church ought to challenge any prerogative over any other"; and that "the magistrate is not to meddle with religion, or matters of conscience nor compel men to this or that form of religion." This is the first known expression of absolute liberty of conscience in any confession of faith.

Smyth died in Holland, but in 1612 Helwys returned to England with his church and formed the first Baptist church worshipping on English soil. The church met in Newgate Street, London, and was the origin of the "General" Baptist denomination. Helwys and his followers were Arminians, repudiating with heat the Calvinistic doctrine of predestination. They thus differed from other Independents. "They also differed on the power of the magistrate in matters of belief and conscience. It was, in short, from their little dingy meeting house ... that there flashed out, first in England, the absolute doctrine of Religious Liberty" (Prof. Masson). Leonard Busher, the author of "Religious Peace: or a Plea for Liberty of Conscience," was a member of this church.

The next great event in the history of the Baptists (though it should be mentioned that the last execution for heresy in England by burning was that of a Baptist, Edward Wightman, at Lichfield

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1612) is the rise of the first Calvinistic or Particular Baptist Church. This was the Jacob church in Southwark, which numbered among its members John Lothropp or Lathrop (d. 1653), Praise-God Barbon (ca. 1596-1679), Henry Jessey (1601-1663), Hanserd Knollys (ca. 1599-1691) and William Kiffin (1616-1701). It was originally Independent but then became Baptist. From this six other churches sprang, five of which were Baptist. Before the Jacob church, however, had itself become Baptist, it dismissed from its membership a group of its members (the church having grown beyond what was regarded as proper limits) who, in 1633, became the first Particular Baptist Church.

Thus there were now in existence in England two sets of Baptists whose origins were quite distinct and who never had any real intercourse as churches. They differed in many respects. The General Baptists were Arminian, owing to the influence of the Mennonite Anabaptists. The Particular Baptists were Calvinist, springing as they did from the Independents. But on the question of Baptism both groups, while they utterly rejected the baptism of infants, were as yet unpledged to immersion and rarely practised it. The development of their doctrine as to baptism was marked along three lines of dispute:—(1) who is the proper administrator of baptism? (2) who are the proper subjects? and (3) what is the proper mode? Eventually agreement was reached, and in 1644 a Confession of Faith was published in the names of the Particular Baptist churches of London, now grown to seven, "commonly (though falsely) called Anabaptist."

The article on baptism is as follows:—"That baptism is an ordinance of the New Testament given by Christ to be dispensed only upon persons professing faith, or that are disciples, or taught, who, upon a profession of faith, ought to be baptized." "The way and manner of dispensing this ordinance the Scripture holds out to be dipping or plunging the whole body under water." They further declare (particularly in order that they may avoid the charge of being Anabaptists) that "a civil magistracy is an ordinance of God," which they are bound to obey. They speak of the "breathing time" which they have had of late, and their hope that God would, as they say, "incline the magistrates' hearts so for to tender our consciences as that we might be protected by them from wrong, injury, oppression and molestation"; and then they proceed: "But if God withhold the magistrates' allowance and furtherance herein, yet we must, notwithstanding, proceed together in Christian communion, not daring to give place to suspend our practice, but to walk in obedience to Christ in the profession and holding forth this faith before mentioned, even in the midst of all trials and afflictions, not accounting our goods, lands, wives, children, fathers, mothers, brethren, sisters, yea, and our own lives, dear unto us, so that we may finish our course with joy; remembering always that we ought to obey God rather than men." They end their confession thus: "If any take this that we have said to be heresy, then do we with the apostle freely confess, that after the way which they call heresy worship we the God of our fathers, believing all things which are written in the Law and in the Prophets and Apostles, desiring from our souls to disclaim all heresies and opinions which are not after Christ, and to be stedfast, unmovable, always abounding in the work of the Lord, as knowing our labour shall not be in vain in the Lord." The "breathing time" was not of long continuance. Soon after the Restoration (1660) the meetings of nonconformists were continually disturbed and preachers were fined or imprisoned. One instance of these persecutions will, perhaps, be more impressive than any general statements. In the records of the Broadmead Baptist Church, Bristol, we find this remark: "On the 29th of November 1685 our pastor, Brother Fownes, died in Gloucester jail, having been kept there for two years and about nine months a prisoner, unjustly and maliciously, for the testimony of Jesus and preaching the gospel. He was a man of great learning, of a sound judgment, an able preacher, having great knowledge in divinity, law, physic, &c.; a bold and patient sufferer for the Lord Jesus and the gospel he preached."

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With the Revolution of 1688, and the passing of the Act of Toleration in 1689, the history of the persecution of Baptists, as well as of other Protestant dissenters, ends. The removal of the remaining disabilities such as those imposed by the Test and Corporation Acts repealed in 1828, has no special bearing on Baptists more than on other nonconformists. The ministers of the "three denominations of dissenters,"—Presbyterians, Independents and Baptists,—resident in London and the neighbourhood, had the privilege accorded to them of presenting on proper occasions an address to the sovereign in state, a privilege which they still enjoy under the name of "the General Body of Protestant Dissenting Ministers of the three Denominations." The "General Body" was not organized until 1727.

The Baptists, having had a double origin, continued for many years in two sections—those who in accordance with Arminian views held the doctrine of "General Redemption," and those who, agreeing with the Calvinistic theory, held the doctrine of "Particular Redemption"; and hence they were known respectively as General Baptists and Particular Baptists. In the 18th century many of the General Baptists gradually adopted the Arian, or, perhaps, the Socinian theory; whilst, on the other hand, the Calvinism of the Particular Baptists in many of the churches became more rigid, and approached or actually became Antinomianism. In 1770 the orthodox portion of the General Baptists, mainly under the influence of Dan Taylor (b. 1738), formed themselves into a separate association, under the name of the General Baptist New Connection, since which time the "Old Connection" has gradually merged into the Unitarian denomination. By the beginning of the 19th century the New Connection numbered 40 churches and 3400 members. The old General Baptists "still keep up a shadowy legal existence." Towards the end of the 18th century many of the Particular Baptist churches became more moderate in their Calvinism, a result largely attributable to the writings of Andrew Fuller. Up to this time a great majority of the Baptists admitted none either to membership or communion who were not baptized, the principal exception being the churches in Bedfordshire and Hertfordshire, founded

or influenced by Bunyan, who maintained that difference of opinion in respect to water baptism was no bar to communion. At the beginning of the 19th century this question was the occasion of great and long-continued discussion, in which the celebrated Robert Hall (1764-1831) took a principal part. The practice of mixed communion gradually spread in the denomination. Still more recently many Baptist churches have considered it right to admit to full membership persons professing faith in Christ, who do not agree with them respecting the ordinance of baptism. Such churches justify their practice on the ground that they ought to grant to all their fellow-Christians the same right of private judgment as they claim for themselves. It may not be out of place here to correct the mistake, which is by no means uncommon, that the terms Particular and General as applied to Baptist congregations were intended to express this difference in their practice, whereas these terms related, as has been already said, to the difference in their doctrinal views. The difference now under consideration is expressed by the terms "strict" and "open," according as communion (or membership) is or is not confined to persons who, according to their view, are baptized.

In 1891, largely under the influence of Dr John Clifford, a leading General Baptist, the two denominations, General and Particular, were united, there being now but one body called "The Baptist Union of Great Britain and Ireland." This Union, however, is purely voluntary, and some Baptist churches, a few of them prosperous and powerful, hold aloof from their sister churches so far as organization is concerned.

There are other Baptist bodies outside the Baptist Union beside certain isolated churches. Throughout England there are many "Strict" Baptist churches which really form a separate denomination. For the most part they are linked together according to geographical distribution in associations, such as the "Metropolitan Association of Strict Baptist Churches," and the "Suffolk and Norfolk Association of Particular Baptist Churches." In the latter case the name "Particular" is preferred, but the association holds aloof from other Baptist churches because its principles are "strict." There is, however, no national Union. Indeed, the Strict Baptists are themselves divided into the "Standard" and "Vessel" parties—names derived from the "Gospel Standard" and "Earthen Vessel," the organs of the rival groups.

The general characteristic of the Strict Baptists is their rigorous adherence to a type of Calvinistic theology now generally obsolete, and their insistence upon baptism as the condition of Christian communion. Their loose organization makes it impossible to obtain accurate statistics, but the number of their adherents is small. There is a strict Baptist Missionary Society (founded 1860, refounded 1897) which conducts mission work in South India. The income of this society was £1146 in 1905. It comprises 730 church members and 72 pastors and workers.

The Baptists early felt the necessity of providing an educated ministry for their congregations. Some of their leading pastors had been educated in one or other of the English universities. Others had by their own efforts obtained a large amount of learning, amongst whom Dr John Gill was eminent for his knowledge of Hebrew, as shown in his Exposition of the Holy Scriptures, a work in 9 vols. folio, 1746-1766. Edward Terrill, who died in 1685, left a considerable part of his estate for the instruction of young men desiring to be trained for the ministry, under the superintendence of the pastor of the Broadmead Church, Bristol, of which he was a member. Other bequests for the same purpose were made, and from the year 1720 the Baptist Academy, as it was then called, received young men as students for the ministry among the Baptists. In 1770 the Bristol Education Society was formed to enlarge this academy; and about the year 1811 the present Bristol Baptist College was erected. In the north of England a similar education society was formed in 1804 at Bradford, Yorkshire, which has since been removed to Rawdon, near Leeds. In London another college was formed in 1810 at Stepney; it was removed to Regent's Park in 1856. The Pastors' College in connexion with the Metropolitan Tabernacle was instituted in 1856, and in 1866 the present Baptist College at Manchester was instituted at Bury in the interests of the "Strict" Baptist views. Besides these, which were voluntary colleges not under denominational control, the General Baptists maintained a college since 1797, which, since the amalgamation of the two Baptist bodies, has become also a voluntary institution, though previously supported by the General Baptist Association. It is called the "Midland Baptist College," and is situated in Nottingham. There is also a Baptist theological college in Glasgow, and there are two colleges in Wales and one in Ireland. The total number of students in these institutions is about 210.

The Baptists were the first denomination of British Christians to undertake in a systematic way that work of missions to the heathen, which became so prominent a feature in the religious activity of the 19th century. As early as the year 1784 the Northamptonshire Association of Baptist churches resolved to recommend that the first Monday of every month should be set apart for prayer for the spread of the gospel. Shortly after, in 1792, the Baptist Missionary Society was formed at Kettering in Northamptonshire, after a sermon on Isaiah lii. 2, 3, preached by William Carey (1761-1834), the prime mover in the work, in which he urged two points: "Expect great things from God; attempt great things for God." In the course of the following year Carey sailed for India, where he was joined a few years later by Marshman and Ward, and the mission was established at Serampore. The great work of Dr Carey's life was the translation of the Bible into the various languages and dialects of India. The society's operations are now carried on, not only in the East, but in the West Indies, China, Africa (chiefly on the Congo river), and Europe.

In regard to church government, the Baptists agree with the Congregationalists that each separate church is complete in itself, and has, therefore, power to choose its own ministers and

to make such regulations as it deems to be most in accordance with the purpose of its existence, that is, the advancement of the kingdom of Christ. A comparatively small section of the denomination maintain that a "plurality of elders" or pastors is required for the complete organization of every separate church. This is the distinctive peculiarity of those churches in Scotland and the north of England which are known as *Scotch Baptists*. The largest church of this section, consisting of approximately 500 members, originated in Edinburgh in 1765, before which date only one Baptist church—that of Keiss in Caithness, formed about 1750—appears to have existed in Scotland. The greater number of the churches are united in association voluntarily formed, all of them determined by geographical limits. The associations, as well as the churches not in connexion with them, are united together in the Baptist Union of Great Britain and Ireland, formed in 1813 by the Particular Baptists. This union, however, exerts no authoritative action over the separate churches. One important part of the work of the union is the collection of information in which all the churches are interested. In 1909 there were in the United Kingdom: Baptist churches, 3046; chapels, 4124; sittings, 1,450,352; members, 424,008; Sunday school teachers, 58,687; Sunday scholars, 578,344; local preachers, 5615; and pastors in charge, 2078.

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At the beginning of the 20th century the Baptist Union collected a "Twentieth Century Fund" of £250,000, which has largely assisted the formation of new churches, and gives an indication of the unity and virility of the denomination. A still stronger evidence to the same effect was given by the Religious Census taken in 1904. While this only applied to London, its results are valuable as showing the comparative strength of the Baptist Church. These results are to the effect that in all respects the Baptists come second to the Anglicans in the following three particulars:—(1) Percentage of attendances at public worship contributed by Baptists, 10.81 (London County), 10.70 (Greater London); (2) aggregate of attendances, 54,597; (3) number of places of worship, 443.

- 2. The Continent of Europe.—During the 19th century what we have called the modern Baptist movement made its appearance in nearly every European country. In Roman Catholic countries Baptist churches were formed by missionaries coming from either England or America: work in France began in 1832, in Italy missions were started in 1866 (Spezia Mission) and in 1884 (Baptist Missionary Society, which also has a mission in Brittany), and in Spain in 1888. In Protestant countries and in Russia the Baptist movement began without missionary intervention from England or America. J. G. Oncken (1800-1884) formed the first church in Hamburg in 1834, and thereafter Baptist churches were formed in other countries as follows:—Denmark (1839), Holland and Sweden (1848), Switzerland (1849), Norway (1860), Austria and Rumania (1869), Hungary (1871), and Bulgaria (1884). Baptist churches also began to be formed in Russia and Finland in the 'fifties and 'sixties.
- 3. British Colonies.—In every colony the Baptists have a considerable place. There are unions of Baptist churches in the following colonies:—New South Wales, Victoria, S. Australia, Western Australia, Queensland, New Zealand, Tasmania, Canada (four Unions) and S. Africa. The work in S. Africa is assisted by the Baptist South African Missionary and Colonial Aid Society, having its seat in London.

The Baptist World Alliance was formed in 1905, when the first Baptist World Congress was held in London. The preamble of the constitution of this Alliance sufficiently indicates its nature: "Whereas, in the providence of God, the time has come when it seems fitting more fully to manifest the essential oneness in the Lord Jesus Christ, as their God and Saviour, of the churches of the Baptist order and faith throughout the world, and to promote the spirit of fellowship, service and co-operation among them, while recognizing the independence of each particular church and not assuming the functions of any existing organization, it is agreed to form a Baptist alliance, extending over every part of the world." This alliance does in fact include Baptists in every quarter of the globe, as will be seen from the following statistics:—

| | Churches. | Members. |
|-----------------------------|-----------|-----------|
| United States— | | |
| National Baptist Convention | 16,996 | 2,110,269 |
| Southern Baptist Convention | 20,431 | 1,832,638 |
| "Disciples of Christ" | 11,157 | 1,235,798 |
| Thirty-five Northern States | 8,894 | 986,821 |
| Fourteen other Bodies | 7,921 | 414,775 |
| Australasia | 270 | 23,253 |
| Canada | 985 | 103,062 |
| S. Africa | 52 | 4,865 |
| United Kingdom | 2,934 | 426,563 |
| Austria Hungary | 37 | 9,783 |
| Denmark | 29 | 3,954 |
| Finland | 43 | 2,301 |
| France | 28 | 2,278 |
| Germany | 180 | 32,462 |
| Italy | 53 | 1,375 |
| Mexico and Central America | 58 | 1,820 |

| Netherlands | 22 | 1,413 |
|----------------------------------|--------|-----------|
| Norway | 39 | 2,849 |
| Rumania and Bulgaria | 5 | 374 |
| Russia and Poland ^[1] | 131 | 24,136 |
| S. America | 63 | 3,641 |
| Spain | 7 | 245 |
| Sweden | 567 | 43,305 |
| Switzerland | 8 | 796 |
| West Indies | 318 | 42,310 |
| Ceylon | 25 | 1,044 |
| China | 137 | 12,160 |
| India | 1,215 | 121,716 |
| Japan | 40 | 2,326 |
| Palestine | 1 | 106 |
| Philippines | 4 | 425 |
| Congo | 21 | 4,673 |
| West Africa | 10 | 629 |
| Total | 72,681 | 7,454,165 |

In 1909 the comparative totals were roughly:—72,988 churches; 7,480,940 members. In both sets of figures the Disciples of Christ (U.S.A.) are included.

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(N. H. M.)

4. United States of America.—The first Baptist Church in America was that founded in the Providence settlement on Narragansett Bay under the leadership of Roger Williams (q, v). Having been sentenced to banishment (October 1635) by the Massachusetts Court because of his persistence in advocating separatistic views deemed unsettling and dangerous, to escape deportation to England he betook himself (January 1636) to the wilderness, where he was hospitably entertained by the natives who gave him a tract of land for a settlement. Having been joined by a few friends from Massachusetts, Williams founded a commonwealth in which absolute religious liberty was combined with civil democracy. In the firm conviction that churches of Christ should be made up exclusively of regenerate members, the baptism of infants appeared to him not only valueless but a perversion of a Christian ordinance. About March 1639, with eleven others, he decided to restore believers' baptism and to form a church of baptized believers. Ezekiel Holliman, who had been with him at Plymouth and shared his separatist views, first baptized Williams and Williams baptized the rest of the company. Williams did not long continue to find satisfaction in the step he had taken. Believing that the ordinances and apostolic church organization had been lost in the general apostasy, he became convinced that it was presumptuous for any man or company of men to undertake their restoration without a special divine commission. He felt compelled to withdraw from the church and to assume the position of a seeker. He continued on friendly terms with the Baptists of Providence, and in his writings he expressed the conviction that their practice came nearer than that of other communities to the first practice of Christ.

In November 1637 John Clarke (1609-1676), a physician, of religious zeal and theological acumen, arrived at Boston, where, instead of the religious freedom he was seeking, he found the dominant party in the Antinomian controversy on the point of banishing the Antinomian minority, including Mrs Anne Hutchinson (q.v.) and her family, John Wheelwright (c. 1592-1679), and William Coddington (1601-1678). Whether from sympathy with the persecuted or aversion to the persecutors, he cast in his lot with the former and after two unsuccessful attempts at settlement assisted the fugitives in forming a colony on the island of Aquidnek (Rhode Island), procured from the Indians through the good offices of Williams. By 1641 there were, according to John Winthrop, "professed Anabaptists" on the island, and Clarke was probably their leader. Robert Lenthall, who joined the Newport company in 1640 when driven from Massachusetts, probably brought with him antipaedobaptist convictions. Mrs Scott, sister of Mrs Hutchinson, is thought to have been an aggressive antipaedobaptist when the colony was founded. Mark Lucar, who was baptized by immersion in London in January 1642 (N.S.) and was a member of a Baptist church there, reached Newport about 1644. A few years later we find him associated with Clarke as one of the most active members of the Newport church, and as the date of the organization is uncertain, there is some reason to suspect that he was a constituent member, and that as a baptized man he took the initiative in baptizing and organizing. At any rate we have in Lucar an

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interesting connecting link between early English and American Baptists.

The Providence church maintained a rather feeble existence after Williams's withdrawal, with Thomas Olney (d. 1682), William Wickenden, Chad Brown (d. 1665) and Gregory Dexter as leading members. A schism occurred in 1652, the last three with a majority of the members contending for general redemption and for the laying on of hands as indispensable to fellowship, Olney, with the minority, maintaining particular redemption and rejecting the laying on of hands as an ordinance. Olney's party became extinct soon after his death in 1682. The surviving church became involved in Socinianism and Universalism, but maintained a somewhat vigorous life and, through Wickenden and others, exerted considerable influence at Newport, in Connecticut, New York and elsewhere. Dexter became, with Williams and Clarke, a leading statesman in Rhode Island and Providence Plantations.

The Newport church extended its influence into Massachusetts, and in 1649 we find a group of Baptists at Rehoboth, with Obadiah Holmes as leader. The intolerance of the authorities rendered the prosecution of the work impracticable and these Massachusetts Baptists became members of the Newport church. In 1651 Clarke, Holmes and Joseph Crandall of the Newport church made a religious visit to Lynn, Mass. While holding a meeting in a private house they were arrested and were compelled to attend the church services of the standing order. For holding an unlawful meeting and refusing to participate quietly in the public service they were fined, imprisoned and otherwise maltreated. While in England on public business in 1652, Clarke published *Ill News from New England*, which contained an impressive account of the proceedings against himself and his brethren at Lynn, and an earnest and well-reasoned plea for liberty of conscience.

Henry Dunster (1612-1659), the first president of the college at Cambridge (Harvard), had by 1653 become convinced that "visible believers only should be baptized." Being unwilling to hold his views in abeyance, he relinquished in 1654, under circumstances of considerable hardship, the work that he greatly loved.

In 1663 John Myles (1621-1683), a Welsh Baptist who had been one of Cromwell's Tryers, with his congregation, took refuge in Massachusetts from the intolerance of the government of Charles II. They were allowed to settle in Rehoboth, Mass., and even after they were discovered to be Baptists they were allowed to remain on condition of establishing their meeting-place at a considerable distance from that of the standing order. Myles did much to promote the growth of the Baptist Church in Massachusetts, and was of service to the denomination in Boston and elsewhere. Thomas Gould of Charlestown seems to have been in close touch with President Dunster and to have shared his antipaedobaptist views as early as 1654. Some time before 1665 several English Baptists had settled in the neighbourhood of Boston and several others had adopted Baptist views. These, with Gould, were baptized (May 1665) and joined with those who had been baptized in England in a church covenant. The church was severely persecuted, the members being frequently imprisoned and fined and denied the use of a building they had erected as a meeting-house. Long after the Act of Toleration (1689) was in full force in England, the Boston Baptists pleaded in vain for the privileges to which they were thereby entitled, and it required the most earnest efforts of English Baptists and other dissenters to gain for them a recognition of the right to exist. A mandate from Charles II. (July 1679), in which the Massachusetts authorities were sharply rebuked for denying to others the liberty to secure which they themselves had gone into exile, had produced little effect.

In 1682 William Screven (1629-1713) and Humphrey Churchwood, members of the Boston church, gathered and organized, With the co-operation of the mother church, a small congregation at Kittery, Me. Persecution led to migration, Screven and some of the members making their way to South Carolina, where, with a number of English Baptists of wealth and position, what became the First Baptist church in Charleston, was organized (about 1684). This became one of the most important of early Baptist centres, and through Screven's efforts Baptist principles became widely disseminated throughout that region. The withdrawal of members to form other churches in the neighbourhood and the intrusion of Socinianism almost extinguished the Charleston church about 1746.

A few Baptists of the general (Arminian) type appeared in Virginia from 1714 onward, and were organized and fostered by missionaries from the English General Baptists. By 1727 they had invaded North Carolina and a church was constituted there.

From 1643 onward antipaedobaptists from New England and elsewhere had settled in the New Netherlands (New York). Lady Deborah Moody left Massachusetts for the New Netherlands in 1643 because of her antipaedobaptist views and on her way stopped at New Haven, where she won to her principles Mrs Eaton, the wife of the governor, Theophilus Eaton. She settled at Gravesend (now part of Brooklyn) having received from the Dutch authorities a guarantee of religious liberty. Francis Doughty, an English Baptist, who had spent some time in Rhode Island, laboured in this region in 1656 and baptized a number of converts. This latter proceeding led to his banishment. Later in the same year William Wickenden of Providence evangelized and administered the ordinances at Flushing, but was heavily fined and banished. From 1711 onward Valentine Wightman (1681-1747) of Connecticut (General Baptist) made occasional missionary visits to New York at the invitation of Nicolas Eyres, a business man who had adopted Baptist views, and in 1714 baptized Eyres and several others, and assisted them in organizing a church. The church was well-nigh wrecked (1730) by debt incurred in the erection of a meeting-house. A number of Baptists settled on Block Island about 1663. Some time before 1724 a Baptist church (probably Arminian) was formed at Oyster Bay.

The Quaker colonies, with their large measure of religious liberty, early attracted a considerable number of Baptists from New England, England and Wales. About 1684 a Baptist church was founded at Cold Spring, Bucks county, Pa., through the efforts of Thomas Dungan, an Irish Baptist minister who had spent some time in Rhode Island. The Pennepek church was formed in 1688 through the labours of Elias Keach, son of Benjamin Keach (1640-1704), the famous English evangelist. Services were held in Philadelphia under the auspices of the Pennepek church from 1687 onward, but independent organization did not occur till 1698. Several Keithian Quakers united with the church, which ultimately became possessed of the Keithian meeting-house. Almost from the beginning general meetings had been held by the churches of these colonies. In 1707 the Philadelphia Association was formed as a delegated body "to consult about such things as were wanting in the churches and to set them in order." From its inception this body proved highly influential in promoting Baptist co-operation in missionary and educational work, in efforts to supply the churches with suitable ministers and to silence unworthy ones, and in maintaining sound doctrine. Sabbatarianism appeared within the bounds of the association at an early date and Seventh-day Baptist churches were formed (1705 onward).

The decades preceding the "Great Awakening" of 1740-1743 were a time of religious declension. A Socinianized Arminianism had paralysed evangelistic effort. The First Church, Providence, had long since become Arminian and held aloof from the evangelism of Edwards, Whitefield and their coadjutors. The First Church, Boston, had become Socinianized and discountenanced the revival. The First Church, Newport, had been rent asunder by Arminianism, and the nominally Calvinistic remnant had itself become divided on the question of the laying on of hands and showed no sympathy with the Great Awakening. The First Church, Charleston, had been wrecked by Socinianism. The General (Six Principles) Baptists of Rhode Island and Connecticut had increased their congregations and membership, and before the beginning of the 18th century had inaugurated annual associational meetings. But the fact that the Great Awakening in America was conducted on Calvinistic principles was sufficient to prevent their hearty co-operation. The churches of the Philadelphia Association were organized and engaged to some extent in missionary endeavour, but they showed little interest in the Edwards-Whitefield movement. And yet the Baptists ultimately profited by the Great Awakening beyond almost any of the denominations. In many New England communities a majority in the churches of the standing order bitterly opposed the new evangelism, and those who came under its influence felt constrained to organize "Separate" or "New Light" churches. These were severely persecuted by the dominant party and were denied even the scanty privileges that Baptists had succeeded in gaining. As the chief objection of the "Separates" to the churches of the standing order was their refusal to insist on personal regeneration as a term of membership, many of them were led to feel that they were inconsistent in requiring regenerate membership and yet administering baptism to unconscious infants. In several cases entire "Separate" churches reached the conviction that the baptism of infants was not only without Scriptural warrant but was a chief corner-stone of state-churchism, and transformed themselves into Baptist churches. In many cases a division of sentiment came to prevail on the matter of infant-baptism, and for a while mutual toleration prevailed; but mixed churches had their manifest disadvantages and separation ultimately ensued.

Among the Baptist leaders gained from Congregationalism as a result of the awakening was Isaac Backus (1724-1806), who became the New England champion in the cause of religious liberty and equality, and the historian of his denomination. To Daniel Marshall (d. 1784) and Shubael Stearns, "New Light" evangelists who became Baptists, the spread of Baptist principles and the multiplication of Baptist churches throughout the southern colonies were in great measure due. The feeble Baptist cause in Virginia and North Carolina had been considerably strengthened by missionaries from the churches of the Philadelphia Association, including Benjamin Griffith, John Gano (1727-1804), John Thomas, Benjamin Miller, Samuel Eaton, John Garrard and David Thomas, and several churches, formed or reformed under their influence, united with the association. In 1776 the Ketockton Association was formed by this group of churches. The Virginia colonial government, in earlier days cruelly intolerant, gave a limited toleration to Baptists of this type; but the "Separate" Baptists were too enthusiastic and too much alive to the evils of state control in religious matters to be willing to take out licences for their meetings, and soon came into sharp conflict with the authorities. Stearns was an evangelist of great power. With Marshall, his brother-in-law, and about a dozen fellow-believers he settled at Sandy Creek, North Carolina, and in a few years had built up a church with a membership of more than six hundred. Marshall afterward organized and ministered to a church at Abbott's Creek about 30 m. distant. From these centres "Separate" Baptist influence spread throughout North and South Carolina and across the Georgia border, Marshall himself finally settling and forming a church at Kiokee, Georgia. From North Carolina as a centre "Separate" Baptist influence permeated Virginia and extended into Kentucky and Tennessee. The Sandy Creek Association came to embrace churches in several colonies, and Stearns, desirous of preserving the harmonious working of the churches that recognized his leadership, resisted with vehemence all proposals for the formation of other associations.

From 1760 to 1770 the growth of the "Separate" Baptist body in Virginia and the Carolinas was phenomenal. Evangelists like Samuel Harris (1724-c.1794) and John Waller (1741-1802) stirred whole communities and established Baptist churches where the Baptist name had hitherto been unknown. The Sandy Creek Association, with Stearns as leader, undertook to "unfellowship ordinations, ministers and churches that acted independently," and provoked such opposition that a division of the association became necessary. The General Association of Virginia and the Congaree Association of South Carolina now took their places side by side with the Sandy Creek.

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The Virginia "Separate" Baptists had more than doubled their numbers in the two years from May 1771 to May 1773. In 1774 some of the Virginia brethren became convinced that the apostolic office was meant to be perpetuated and induced the association to appoint an apostle. Samuel Harris was the unanimous choice and was solemnly ordained. Waller and Elijah Craig (1743-1800) were made apostles soon afterward for the northern district. This arrangement, soon abandoned, was no doubt suggested by Methodist superintendency. In 1775 Methodist influence appeared in the contention of two of the apostles and Jeremiah Walker for universal redemption. Schism was narrowly averted by conciliatory statements on both sides. As a means of preserving harmony the Philadelphia Confession of Faith, a Calvinistic document, with provision against too rigid a construction, was adopted and a step was thus taken toward harmonizing with the "Regular" Baptists of the Philadelphia type. When the General Association was sub-divided (1783), a General Committee, made up of delegates from each district association, was constituted to consider matters that might be for the good of the whole society. Its chief work was to continue the agitation in which for some years the body had been successfully engaged in favour of religious equality and the entire separation of church and state. Since 1780 the "Separate" Baptists had had the hearty co-operation of the "Regular" Baptists in their struggle for religious liberty and equality. In 1787 the two bodies united and agreed to drop the names "Separate" and "Regular." The success of the Baptists of Virginia in securing step by step the abolition of everything that savoured of religious oppression, involving at last the disestablishment and the disendowment of the Episcopal Church, was due in part to the fact that Virginia Baptists were among the foremost advocates of American independence, while the Episcopal clergy were loyalists and had made themselves obnoxious to the people by using the authority of Great Britain in extorting their tithes from unwilling parishioners, and that they secured the co-operation of free-thinking statesmen like Thomas Jefferson and James Madison and, in most measures, that of the Presbyterians.

The Baptist cause in New England that had profited so largely from the Great Awakening failed to reap a like harvest from the War of Independence. The standing order in New England represented the patriotic and popular party. Baptists lost favour by threatening to appeal to England for a redress of their grievances at the very time when resistance to English oppression was being determined upon. The result was slowness of growth and failure to secure religious liberty. Though a large proportion of the New England Baptists co-operated heartily in the cause of independence, the denomination failed to win the popularity that comes from successful leadership.

About 1762 the Philadelphia Association began to plan for the establishment of a Baptist institution of learning that should serve the entire denomination. Rhode Island was finally fixed upon, partly as the abode of religious liberty and because of its intelligent, influential and relatively wealthy Baptist constituency, the consequent likelihood of procuring a charter from its legislature, and the probability that the co-operation of other denominations in an institution under Baptist control would be available. James Manning (1738-1791), who had just been graduated from Princeton with high honours, was thought of as a suitable leader in the enterprise, and was sent to Rhode Island (1763) to confer with leading men, Baptist and other. As a result a charter was granted by the legislature in 1764, and after a few years of preliminary work at Warren (where the first degrees ever bestowed by a Baptist institution were conferred in 1769), Providence was chosen as the home of the college (1770). Here, with Manning as president and Hezekiah Smith (1737-1805), his class-mate at Princeton, as financial agent and influential supporter, the institution (since 1804 known as Brown University) was for many years [v.03 p.0377] the only degree-conferring institution controlled by Baptists. The Warren Association (1767) was organized under the influence of Manning and Smith on the model of the Philadelphia, and became a chief agency for the consolidation of denominational life, the promotion of denominational education and the securing of religious liberty. Hezekiah Smith was a highly successful evangelist, and through his labours scores of churches were constituted in New England. As chaplain in the American Revolutionary Army he also exerted a widespread influence.

The First Church, Charleston, which had become almost extinct through Arminianism in 1746, entered upon a career of remarkable prosperity in 1749 under the leadership of Oliver Hart (1723-1795), formerly of the Philadelphia Association. In 1751 the Charleston Association was formed, also on the model of the Philadelphia, and proved an element of denominational strength. The association raised funds for domestic missionary work (1755 onward) and for the education of ministers (1756 onward). Brown University shared largely in the liberality of members of this highly-cultivated and progressive body. Among the beneficiaries of the education fund was Samuel Stillman (1737-1807), afterward the honoured pastor of the Boston church. The most noted leader of the Baptists of South Carolina during the four decades following the War of Independence was Richard Furman (1755-1825), pastor of the First Church, Charleston. The remarkable numerical progress of Baptists in South Carolina from 1787 to 1812 (from 1620 members to 11,325) was due to the "Separate" Baptist movement under Stearns and Marshall far more than to the activity of the churches of the Charleston Association. Both these types of Baptist life permeated Georgia, the latter making its influence felt in Savannah, Augusta and the more cultivated communities, the former evangelizing the masses. Many negro slaves became Baptists in Virginia, the Carolinas and Georgia. In most cases they became members of the churches of the white Baptists; but in Richmond, Savannah and some other towns they were encouraged to have churches of their own.

By 1812 there were in the United States 173,972 Baptist church members, the denominational

numerical strength having considerably more than doubled since the beginning of the 19th century.

Foreign Missions.—Baptists in Boston and vicinity, Philadelphia and Charleston, and a few other communities had from the beginning of the 19th century taken a deep interest in the missionary work of William Carey, the English missionary, and his coadjutors in India, and had contributed liberally to its support. The conversion to Baptist views of Adoniram Judson (q.v.) and Luther Rice (1812), who had just been sent, with others, by the newly-formed American Board of Commissioners for Foreign Missions to open up missionary work in India, marks an epoch in American Baptist history. Judson appealed to his American brethren to support him in missionary work among the heathen, and Rice returned to America to organize missionary societies to awaken interest in Judson's mission. In January 1813 there was formed in Boston "The Baptist Society for the Propagation of the Gospel in India and other Foreign Parts." Other societies in the Eastern, Middle and Southern states speedily followed. The desirability of a national organization soon became manifest, and in May 1814 thirty-three delegates, representing eleven states, met in Philadelphia and organized the "General Missionary Convention of the Baptist Denomination in the United States of America for Foreign Missions." As its meetings were to be held every three years it came to be known as the "Triennial Convention." A Board of Commissioners was appointed with headquarters in Philadelphia (transferred in 1826 to Boston). The need of a larger supply of educated ministers for home and for mission work alike soon came to be profoundly felt, and resulted in the establishment of Columbian College, Washington (now George Washington University), with its theological department (1821), intended to be a national Baptist institution. Destitution on the frontiers led the Triennial Convention to engage extensively in home mission work (1817 onward), and in 1832 the American Baptist Home Mission Society was constituted for the promotion of this work. The need of an organ for the dissemination of information, and the quickening of interest in the missionary and educational enterprises of the Triennial Convention, led Rice to establish the Latter Day Luminary (1816) and the Columbian Star, a weekly journal (1822). From the first the attempt to rouse the denomination to organized effort for the propagation of the gospel met with much opposition, agents of the Convention being looked upon by the less intelligent pastors and churches as highly-paid and irresponsible collectors of money to be used they knew not how, or for purposes of which they disapproved. The fact that Rice was unduly optimistic and allowed the enterprises of the Convention to become almost hopelessly involved in debt, and was constrained to use some of the fund collected for missions to meet the exigencies of his educational and journalistic work, intensified the hostility of those who had suspected from the beginning the good faith of the agents and denied the scriptural authority of boards, paid agents, paid missionaries, &c. So virulent became the opposition that in several states, as Tennessee and Kentucky, the work of the Convention was for years excluded, and a large majority in each association refused to receive into their fellowship those who advocated or contributed to its objects. Hyper-Calvinism, ignorance and avarice cooperated in making the very name "missions" odious, ministerial education an impertinent human effort to supplant a spirit-called and spirit-endowed ministry, Sunday-schools and prayermeetings as human institutions, the aim of which was to interfere with the divine order, and the receiving of salaries for ministerial work as serving God for hire or rather as serving self. To counteract this influence, Baptist State Conventions were formed by the friends of missions and education, only contributing churches, associations, missionary societies and individuals being invited to membership (1821 onward—Massachusetts had effected state organization in 1802). These became highly efficient in promoting foreign and domestic missions, Sunday-school organization, denominational literature and education. Nearly every state soon had its institutions of learning, which aspired to become universities.

Before 1844 the sessions of the Triennial Convention had occasionally been made unpleasant by harsh anti-slavery utterances by Northern members against their Southern brethren and somewhat acrimonious rejoinders by the latter. The controversy between Francis Wayland and Richard Fuller (1804-1876) on the slavery question ultimately convinced the Southern brethren that separate organization for missionary work was advisable. The Southern Baptist Convention, with its Home and Foreign Missionary Boards, and (later) its Sunday-school Board, was formed in 1845. Since then Northern and Southern Baptists, though in perfect fellowship with each other, have found it best to carry on their home and foreign missionary work through separate boards and to have separate annual meetings. In 1905 a General Baptist Convention for America was formed for the promotion of fellowship, comity and denominational *esprit de corps*, but this organization is not to interfere with the sectional organizations or to undertake any kind of administrative work.

Since 1845 Northern and Southern Baptists alike have greatly increased in numbers, in missionary work, in educational institutions, in literary activity and in everything that pertains to the equipment and organization of a great religious denomination. Since 1812 they have increased in numbers from less than 200,000 to more than 5,000,000. In 1812 American Baptists had no theological seminary; in 1906 they had 11 with more than 100 instructors, 1300 students, and endowments and equipments valued at about \$7,000,000. In 1812 they had only one degree-conferring college with a small faculty, a small student body and almost no endowment; in 1906 they had more than 100 universities and colleges with endowment and equipment valued at about \$30,000,000, and an annual income of about \$3,000,000. In 1812 the value of church property was small; in 1906 it was estimated at \$100,000,000. Then a single monthly magazine, with a circulation of a few hundreds, was all that the denomination possessed in the way of periodical literature; in 1906 its quarterlies, monthlies and weeklies were numbered by hundreds. The denomination has a single publishing concern (the American Baptist Publication

Society) with an annual business of nearly \$1,000,000 and assets of \$1,750,000.

Baptists in the Dominion of Canada had their rise about the close of the 18th century in migrations from the United States. They have been reinforced by considerable numbers of English, Welsh and Scottish Baptists. They are divided into four sections:—those of the Maritime Provinces, with their Convention, their Home and Foreign Mission Boards, an Education Board and a Publication Board, and with M^cMaster University (Arts, Theological and Academic departments) as its educational institution; those of Manitoba and the North-west, with Brandon College as its educational institution; and those of British Columbia. Canadian Baptists numbered 120,000 in 1909, and are considered in the above general estimates.

(A. H. N.)

[1] The figures for Russia include only the German-speaking Baptists. It is impossible to ascertain the numbers of properly Russian Baptists. Estimates have been made which vary from 60,000 to 100,000.

BAR, FRANÇOIS DE (1538-1606), French scholar, was born at Seizencourt, near St Quentin, and having studied at the university of Paris entered the order of St Benedict. He soon became prior of the abbey of Anchin, near Pecquencourt, and passed much of his time in the valuable library of the abbey, studying ecclesiastical history, especially that of Flanders. He also made a catalogue of the manuscripts at Anchin and annotated many of them. During the French Revolution his manuscripts passed to the library at Douai. Bar died at Anchin on the 25th of March 1606.

See J. Lelong, *Bibliothèque historique de la France* (Paris, 1768-1778); C. C. A. Dehaisnes, "Catalogue des manuscrits de Douai," in the *Catalogue général des manuscrits des bibliothèques des départements*, t. vi. (Paris, 1849-1885).

BAR, a town of Russia, in the government of Podolia, 50 m. N.E. of Kamenets, on an affluent of the Bug. Pop. (1897) 10,614. It was formerly called Rov. Its present designation was bestowed upon it in memory of Bari in Italy (where she was born) by Bona Sforza, the consort of Sigismund I. of Poland, who rebuilt the town after its destruction in 1452 by the Tatars. From 1672 to 1699 it remained in possession of the Turks. In 1768 a confederation of the Polish nobles (see next article) against the Russians was formed in the town, which was shortly after taken by storm, but did not become finally united to Russia till the partition of 1793.

BAR, CONFEDERATION OF, a famous confederation of the Polish nobles and gentry formed at the little fortress of Bar in Podolia in 1768 to defend the internal and external independence of Poland against the aggressions of the Russian government as represented by her representative at Warsaw, Prince Nicholas Repnin. The originators of this confederation were Adam Krasinski, bishop of Kamenets, Osip Pulawski and Michael Krasinski. King Stanislaus was at first inclined to mediate between the confederates and Russia; but finding this impossible, sent a force against them under the grand hetman Ksawery Branicki and two generals, who captured Bar. Nevertheless, a simultaneous outbreak of a jacquerie in Little-Russia contributed to the extension of the confederation throughout the eastern province of Poland and even in Lithuania. The confederates, thereupon, appealed for help abroad and contributed to bring about a war between Russia and Turkey. So serious indeed was the situation that Frederick II. advised Catherine to come to terms with the confederates. Their bands under Ignaty Malchewsky, Michael Pac and Prince Charles Radziwill ravaged the land in every direction, won several engagements over the Russians, and at last, utterly ignoring the king, sent envoys on their own account to the principal European powers. In 1770 the Council of the Confederation was transferred from its original seat in Silesia to Hungary, from whence it conducted diplomatic negotiations with France, Austria and Turkey with the view of forming a league against Russia. The court of Versailles sent Dumouriez to act as commander-in-chief of the confederates, but neither as a soldier nor as a politician did this adroit adventurer particularly distinguish himself, and his account of his experiences is very unfair to the confederates. Among other blunders, he pronounced King Stanislaus a tyrant and a traitor at the very moment when he was about to accede to the Confederation. The king thereupon reverted to the Russian faction and the Confederation lost the confidence of Europe. Nevertheless, its army, thoroughly reorganized by Dumouriez, gallantly maintained the hopeless struggle for some years, and it was not till 1776 that the last traces of it disappeared.

See Alexander Kraushar, *Prince Repnin in Poland* (Pol.) (Warsaw, 1900); F. A. Thesby de Belcour, *The Confederates of Bar* (Pol.) (Cracow, 1895); Charles François Dumouriez, *Mémoires et correspondance* (Paris, 1834).

(R. N. B.)

BAR (O. Fr. barre, Late Lat. barra, origin unknown), in physical geography, a ridge of sand or silt crossing an estuary under water or raised by wave action above sea-level, forming an impediment to navigation. When a river enters a tidal sea its rate of flow is checked and the material it carries in suspension is deposited in a shifting bar crossing the channel from bank to bank. Where the channel is only partly closed, a spur of this character is called a "spit." A bar may be produced by tidal action only in an estuary or narrow gulf (as at Port Adelaide) where the tides sweep the loose sand backwards and forwards, depositing it where the motion of the water is checked. Nahant Bay, Mass., is bordered by the ridge of Lynn Beach, which separates it from Lynn Harbor, and ties Nahant to the mainland by a bar formed in this way.

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BAR, THE. This term, as equivalent to the profession of barrister (*q.v.*), originated in the partition or bar dividing the English law-courts into two parts, for the purpose of separating the members and officials of the court from the prisoners or suitors, their advocates and the general public. Theoretically, this division of the court is still maintained in England, those who are entitled to sit within the bar including king's counsel, barristers with patents of precedence, serjeants (till the order died out) and solicitors, while the other members of the bar and the general public remain without. Parties in civil suits who appear in person are allowed to stand on the floor within the bar instead of, as formerly, appearing at the bar itself. In criminal trials the accused still stands forward at the bar. There is also a "bar" in parliament. In the House of Commons it remains literally a bar—a long brass rod hidden in a tube from which it is pulled out when required to mark the technical boundary of the House. Before it appear those who are charged with having violated the privileges of the House; below it also sit those members who have been returned at bye-elections, to await their introduction to the House and the taking of the oath of allegiance. In the House of Lords the place where Mr Speaker and the members of the House of Commons stand when summoned by Black Rod is called "the bar."

The "call to the bar" in England, by which a law student at one of the Inns of Court is converted into a barrister, is dealt with under Inns of Court. The exclusive privilege of calling to the bar belongs to those bodies, which also exercise disciplinary power over their members; but it was widely felt by members of the bar in recent years that the benchers or governing body with their self-elected members did not keep a sufficiently watchful eye on the minutiae of the profession. Consequently, in 1883, a bar committee was formed for the purpose of dealing with all matters relating to the profession, such as the criticizing of proposed legal reforms, and the expression of opinions on matters of professional etiquette, conduct and practice. In 1894 the committee was dissolved, and succeeded by the general council of the bar, elected on a somewhat wider basis. It is composed of a due proportion of king's counsel and outer barristers elected by voting-papers sent to all barristers having an address in the *Law List* within the United Kingdom. Its expenses are paid by contributions from the four Inns of Court. Its powers are not disciplinary, but it would draw the attention of the benchers to any gross violation of the professional etiquette of the bar.

Each state in America has its own bar, consisting of all attorneys-at-law residing within it who have been admitted to practice in its courts. Generally attorneys are admitted in one court to practice in all courts. Each of the United States courts has a bar of its own. An attorney of a state cannot practise in a court of the United States unless he has been admitted to it, or to one of the same class in another district or circuit. He cannot appear in the Supreme Court of the United States unless specially admitted and sworn as an attorney of that court, which is done on motion in case of any one who has practised for three years in the highest courts of his state and is in good standing at its bar. In most of the states there is a state bar association, and in some cities and counties local bar associations. These consist of such members of its bar as desire thus to associate, the object being to guard and advance the standards of the profession. Some own valuable libraries. These associations have no official recognition, but their influence is considerable in recommending and shaping legislation respecting the judicial establishment and procedure. They also serve a useful purpose in instituting or promoting proceedings to discipline or expel unworthy attorneys from the bar. There is an American Bar Association, founded in 1878, composed of over 3500 members of different states of like character and position. Some of these associations publish annually a volume of transactions. The rights, duties and liabilities of counsellor-at-law are stated under Attorney. As members of the bar of the state in which they practise they are subject to its laws regulating such practice, e.g. in some states they are forbidden to advertise for divorce cases (New York Penal Code [1902] § 148a) (1905, People v. Taylor [Colorado], 75 Pac. Rep. 914). It is common throughout the United States for lawyers to make contracts for "contingent fees," i.e. for a percentage of the amount recovered. Such contracts are not champertous and are upheld by the courts, but will be set aside if an unconscionable bargain be made with the client (Deering v. Scheyer [N.Y.], 58 App. D. 322). So also by the U.S. Supreme Court (Wright v. Tebbets, 91 U.S. 252; Taylor v. Benis, 110 U.S. 42). The reason for upholding such contracts is that otherwise poor persons would often fail of securing or protecting their property or rights. In fact such contracts are seldom set aside, though no doubt the practice is capable of abuse.

BARA BANKI, a town and district of British India in the Fyzabad division of the United Provinces. The town, which forms one municipality with Nawabganj, the administrative

alone in 1901 was 3020. There is some trade in sugar and cotton.

headquarters of the district, is 17 m. E. of Lucknow by railway. The population of Bara Banki

The district has an area of 1758 sq. m. It stretches out in a level plain interspersed with numerous *jhils* or marshes. In the upper part of the district the soil is sandy, while in the lower part it is clayey and produces finer crops. The principal rivers are the Gogra, forming the northern boundary, and the Gumti, flowing through the middle of the district. In 1856 it came, with the rest of Oudh, under British rule. During the Sepoy war of 1857-1858 the whole of the Bara Banki talukdars joined the mutineers, but offered no serious resistance after the capture of Lucknow. The cultivators are still, for the most part, tenants-at-will, rack-rented and debt-ridden. In 1901 the population was 1,179,323, showing an increase of 4% in the decade. The principal crops are rice, wheat, pulse and other food-grains, sugar-cane and opium. Both the bordering rivers are navigable; and the district is traversed by two lines of the Oudh and Rohilkhand railway, with branches. Trade in agricultural produce is active.

BARABOO, a city and the county-seat of Sauk county, Wisconsin, U.S.A., about 37 m. N.W. of

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Madison, on the Baraboo river, a tributary of the Wisconsin. Pop. (1890) 4605; (1900) 5751, of whom 732 were foreign-born; (1905) 5835; (1910) 6324. The city is served by the Chicago & North-Western railway, which maintains here an engine house and extensive machine shops, and of which it is a division headquarters. Baraboo has an attractive situation on a series of hills about 1000 ft. above sea-level. In the vicinity are Devil's Lake (3 m. S.) and the famous Dells of the Wisconsin river (near Kilbourn, about 12 m. N.), two summer resorts with picturesque scenery. The principal public buildings are the court-house (in a small public park), the public library and a high school. Dairying and the growing of small fruits are important industries in the surrounding region; and there is a large nursery here. Stone quarried in the vicinity is exported, and the city is near the centre of the Sauk county iron range. Among the manufactures are woollen goods, towels, canned fruit and vegetables, dairy products, beer, and circus wagons (the city is the headquarters of the Ringling and the Gollmar circuses). The first permanent settlement here was made in 1839. Baraboo was named in honour of Jean Baribault, an early French trapper, and was chartered as a city in 1882.

BARABRA, a name for the complex Nubian races of the Egyptian Sudan, whose original stock is Hamitic-Berber, long modified by negro crossings. The word is variously derived from *Berberi*, *i.e.* people of Berber, or as identical with *Barabara*, figuring in the inscription on a gateway of Tethmosis I. as the name of one of the 113 tribes conquered by him. In a later inscription of Rameses II. at Karnak (*c.* 1300 B.C.) *Beraberata* is given as that of a southern conquered people. Thus it is suggested that Barabra is a real ethnical name, confused later with Greek and Roman *barbarus*, and revived in its proper meaning subsequent to the Moslem conquest. A tribe living on the banks of the Nile between Wadi Haifa and Assuan are called Barabra. (See further Nubia.)

BARACALDO, a river-port of north-eastern Spain, in the province of Biscay; on the left bank of the river Nervion or Ansa (in Basque, Ibaizabal), 5 m. by rail N.W. of Bilbao. Pop. (1900) 15,013. Few Spanish towns have developed more rapidly than Baracaldo, which nearly doubled its population between 1880 and 1900. During this period many immigrant labourers settled here; for the ironworks and dynamite factory of Baracaldo prospered greatly, owing to the increased output of the Biscayan mines, the extension of railways in the neighbourhood, and the growth of shipping at Bilbao. The low flat country round Baracaldo is covered with maize, pod fruit and vines

BARACOA, a seaport city of N.E. Cuba, in Santiago province. Pop. (1907) 5633. The town lies under high hills on a small circular harbour accessible to small craft. The country round about is extremely rugged. The hill called the "Anvil of Baracoa" (about 3000 ft.) is remarkable for its extremely regular formation. It completely dominates the city's background, and is a well-known sailors' landmark. The town is the trading centre of a large plantation region behind it and is the centre of the banana and cocoanut export trade. There is a fort dating from the middle of the 18th century. Baracoa is the oldest town in Cuba, having been settled by Diego Velazquez in 1512. It held from its foundation the honours of a city. From 1512 to 1514 it was the capital of the island, and from 1518 to 1522 its church was the cathedral of the island's first diocese. Both honours were taken from it to be given to Santiago de Cuba; and for two centuries after this Baracoa remained an obscure village, with little commerce. In the 16th century it was repeatedly plundered by pirates until it came to terms with them, gave them welcome harbourage, and based a less precarious existence upon continuous illicit trade. Until the middle of the 18th century Baracoa was almost without connexion with Havana and Santiago. In the wars of the end of the century it was a place of deposit for French and Spanish corsairs. At this time, too, about 100 fugitive immigrant families from Santo Domingo greatly augmented its industrial importance. In 1807 an unsuccessful attack was made upon the city by an English force. In 1826 the port was opened to foreign commerce.

BARAHONA DE SOTO, LUIS (1535?-1595), Spanish poet, was born about 1535 at Lucena (Cordova), was educated at Granada, and practised as a physician at Cordova. His principal poem is the *Primera parte de la Angélica* (1586), a continuation of the *Orlando furioso*; the second part was long believed to be lost, but fragments of it have been identified in the anonymous *Diálogos de la monteria*, first printed in 1890; the *Diálogos* also embody fragments of a poem by Barahona entitled *Los Principios del mundo*, and many graceful lyrics by the same writer have been published by Francisco Rodriguez Marín. Cervantes describes Barahona as "one of the best poets not only in Spain, but in the whole world"; this is friendly hyperbole. Nevertheless Barahona has high merits: poetic imagination, ingenious fancy, and an exceptional mastery of the methods transplanted to Spain from Italy. His *Angélica* has been reproduced in facsimile (New York, 1904) by Archer M. Huntington.

See F. Rodriguez Marín, Luis Barahona de Solo, estudio biográfico, bibliografico, y critico (Madrid. 1903); Diálogos de la monteria, edited by F. R. de Uhagón (Madrid, 1890).

(J. F.-K.)

BARANTE, AMABLE GUILLAUME PROSPER BRUGIÉRE, BARON DE (1782-1866), French statesman and historian, the son of an advocate, was born at Riom on the 16th of June 1782. At the age of sixteen he entered the École Polytechnique at Paris, and at twenty obtained his first appointment in the civil service. His abilities secured him rapid promotion, and in 1806 he obtained the post of auditor to the council of state. After being employed in several political missions in Germany, Poland and Spain, during the next two years, he became prefect of Vendée. At the time of the return of Napoleon I. he held the prefecture of Nantes, and this post he immediately resigned. On the second restoration of the Bourbons he was made councillor of state

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and secretary-general of the ministry of the interior. After filling for several years the post of director-general of indirect taxes, he was created in 1819 a peer of France and was prominent among the Liberals. After the revolution of July 1830, M. de Barante was appointed ambassador to Turin, and five years later to St Petersburg. Throughout the reign of Louis Philippe he remained a supporter of the government; and after the fall of the monarchy, in February 1848, he withdrew from political affairs and retired to his country seat in Auvergne. Shortly before his retirement he had been made grand cross of the Legion of Honour. Barante's Histoire des ducs de Bourgogne de la maison de Valois, which appeared in a series of volumes between 1824 and 1828, procured him immediate admission to the French Academy. Its narrative qualities, and purity of style, won high praise from the romantic school, but it exhibits a lack of the critical sense and of scientific scholarship. Amongst his other literary works are a Tableau de la littérature française au dixhuitième siècle, of which several editions were published; Des communes et de l'aristocratie (1821); a French translation of the dramatic works of Schiller; Questions constitutionnelles (1850); Histoire de la Convention Nationale, which appeared in six volumes between 1851 and 1853; Histoire du Directoire de la République française (1855); Études historiques et biographiques (1857); La Vie politique de M. Royer-Collard (1861). The version of Hamlet for Guizot's Shakespeare was his work. He died on the 22nd of November 1866.

His *Souvenirs* were published by his grandson (Paris, 1890-99). See also the article by Guizot in the *Revue des deux Mondes*, July 1867.

BARASAT, a subdivisional town in the district of the Twenty-four Parganas, Bengal, India. For a considerable time Barasat town was the headquarters of a joint magistracy, known as the "Barasat District," but in 1861, on a readjustment of boundaries Barasat district was abolished by order of government, and was converted into a subdivision of the Twenty-four Parganas. Pop. (1901) 8634. It forms a striking illustration of the rural character of the so-called "towns" in Bengal, and is merely an agglomeration of 41 separate villages, in which all the operations of husbandry go on precisely as in the adjacent hamlets.

BARATIER, JOHANN PHILIPP (1721-1740), German scholar of precocious genius, was born at Schwabach near Nuremberg on the 10th of January 1721. His early education was most carefully conducted by his father, the pastor of the French church at Schwabach, and so rapid was his progress that by the time he was five years of age he could speak French, Latin and Dutch with ease, and read Greek fluently. He then studied Hebrew, and in three years was able to translate the Hebrew Bible into Latin or French. He collected materials for a dictionary of rare and difficult Hebrew words, with critical and philological observations; and when he was about eleven years old translated from the Hebrew Tudela's *Itinerarium*. In his fourteenth year he was admitted master of arts at Halle, and received into the Royal Academy at Berlin. The last years of his short life he devoted to the study of history and antiquities, and had collected materials for histories of the Thirty Years' War and of Antitrinitarianism, and for an *Inquiry concerning Egyptian Antiquities*. His health, which had always been weak, gave way completely under these labours, and he died on the 5th of October 1740. He had published eleven separate works, and left a great quantity of manuscript.

BARATYNSKI, JEWGENIJ ABRAMOVICH (1800-1844), Russian poet, was educated at the royal school at St Petersburg and then entered the army. He served for eight years in Finland, where he composed his first poem *Eda*. Through the interest of friends he obtained leave from the tsar to retire from the army, and settled in 1827 near Moscow. There he completed his chief work *The Gipsy*, a poem written in the style of Pushkin. He died in 1844 at Naples, whither he had gone for the sake of the milder climate.

A collected edition of his poems appeared at St Petersburg, in 2 vols. in 1835; later editions, Moscow 1869, and Kazan 1884.

BARB. (1) (From Lat. *barba*, a beard), a term used in various senses, of the folds of mucous membrane under the tongue of horses and cattle, and of a disease affecting that part, of the wattles round the mouth of the barbel, of the backward turned points of an arrow and of the piece of folded linen worn over the neck by nuns. (2) (From Fr. *barbe*, meaning "from Barbary"), a name applied to a breed of horses imported by the Moors into Spain from Barbary, and to a breed of pigeons.

BARBACENA, an inland town of Brazil, in the state of Minas Geraes, 150 m. N.N.W. of Rio de Janeiro and about 3500 ft. above sea-level. The surrounding district is chiefly agricultural, producing coffee, sugar-cane, Indian corn and cattle, and the town has considerable commercial importance. It is also noted for its healthiness and possesses a large sanatorium much frequented by convalescents from Rio de Janeiro during the hot season. Barbacena was formerly a principal distributing centre for the mining districts of Minas Geraes, but this distinction was lost when the railways were extended beyond that point.

BARBADOS, or Barbadoes, an island in the British West Indies. It lies 78 m. E. of St Vincent, in 13° 4′ N. and 59° 37′ W.; is 21 m. long, $14\frac{1}{2}$ m. at its broadest, and 166 sq. m. (106,470 acres) in extent (roughly equalling the Isle of Wight). Its coasts are encircled with coral reefs, extending in some places 3 m. seaward. In its configuration the island is elevated but not mountainous. Near the centre is its apex, Mount Hillaby (1100 ft.), from which the land falls on all sides in a series of terraces to the sea. So gentle is the incline of the hills that in driving over the well-constructed roads the ascent is scarcely noticeable. The only natural harbour is Carlisle Bay on the south-

western coast, which, however, is little better than a shallow roadstead, only accessible to light draught vessels.

Geology.—The oldest rocks of Barbados, known as the Scotland series, are of shallow water origin, consisting of coarse grits, brown sandstones and sandy clays, in places saturated with petroleum and traversed by veins of manjak. They have been folded and denuded, so as to form the foundation on which rest the later beds of the island. Upon the denuded edges of the Scotland beds lies the Oceanic series. It includes chalky limestones, siliceous earths, red clay, and, at the top, a layer of mudstone composed mainly of volcanic dust. The limestones contain Globigerina and other Foraminifera, the siliceous beds are made of Radiolaria, sponge spicules and diatoms, while the red clay closely resembles the red clay of the deepest parts of the oceans. There can be no doubt that the whole series was laid down in deep waters. The Oceanic series is generally overlaid directly, and unconformably, by coral limestones; but at Bissex Hill, at the base of the coral limestones, and resting unconformably upon the Oceanic series, there is a Globigerina marl. The Coral Limestone series lies indifferently upon the older beds. Although of no great thickness it covers six-sevenths of the island, rising in a series of steps or platforms to a height of nearly 1100 ft.

Even the Scotland series probably belongs to the Tertiary system, but owing to the want of characteristic fossils, it is impossible to determine with any degree of certainty the precise homotaxis of the several formations. Jukes-Browne and Harrison ascribe the Scotland beds to the Eocene or Oligocene period, the Oceanic series to the Miocene, the Bissex Hill marls to the Pliocene, and the coral limestones partly to the Pliocene and partly to the Pleistocene. But these correlations rest upon imperfect evidence.

Sandstone, and clays suitable for brick-making, are found in the district of Scotland, so called from a fancied resemblance to the Highlands of North Britain. The only other mineral product is manjak, a species of asphalt, also found in this district and to some extent exported.

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Climate, &c.—The climate of Barbados is pleasant. The seasons are divided into wet and dry, the latter (extending from December to the end of May) being also the cold season. The temperature ranges from 70° F. to 86° F., rarely, even on the coldest days, falling below 65° F. The average annual rainfall is about 60 in., September being the wettest month. For eight months the invigorating N.E. trade winds temper the tropical heat. The absence of swamps, the porous nature of the soil, and the extent of cultivation account for the freedom of the island from miasma. Fever is unknown. The climate has a beneficial effect on pulmonary diseases, especially in their earlier stages, and is remarkable in arresting the decay of vital power consequent upon old age. Leprosy occurs amongst the negroes, and elephantiasis is so frequent as to be known as "Barbados leg."

Industries.—The cultivation of sugar was first introduced in the middle of the 17th century, and owing to the cheapness of labour, the extreme fertility of the soil and the care bestowed on its cultivation, became the staple product of the island. Cotton growing has recently become of importance. The few other industries include rum distilleries and factories for chemicals, ice and tobacco. A railway 28 m. long runs from Bridgetown partly round the coast. The island is a place of call for almost all the steamships plying to and from the West Indies, and is a great centre of distribution. There is direct communication at frequent intervals with England, the United States, Canada and the other West Indian islands.

Population and Administration.—The greater part of the inhabitants belong to the Church of England, which exceeds in numbers the combined total of all other denominations. The island is the see of a bishop, who, with the clergy of all creeds, is paid by the government. The chief educational establishment is Codrington College, founded by Colonel Christopher Codrington, who in 1710 bequeathed two estates to the Society for the Propagation of the Gospel. It trains young men for holy orders and is affiliated to the university of Durham. Harrison College and The Lodge are secondary schools for boys, Queen's College for girls. There are several second grade and a large number of primary schools. The colony possesses representative institutions but not responsible government. The crown has a veto on legislation and the home government appoints the public officials, excepting the treasurer. The island is administered by a governor, assisted by an executive council, a legislative council of 9 nominated members, and a house of assembly of 24 members elected on a limited franchise. Barbados is the headquarters of the Imperial Agricultural Department of the West Indies, to which (under Sir Daniel Morris) the island owes the development of cotton growing, &c. The majority of the population consists of negroes, passionately attached to the island, who have a well-marked physiognomy and dialect of their own, and are more intelligent than the other West Indian negroes. They outnumber the whites by 9 to 1. Barbados is one of the most densely populated areas in the world. In 1901 the numbers amounted to 195,588, or 1178 to the sq. m., and in 1906 they were 196,287. There are no crown lands nor forests.

Towns.—Bridgetown (pop. 21,000), the capital, situated on the S.W. coast, is a pretty town nestling at the foot of the hills leading to the uplands of the interior. It has a cathedral, St Michael's, which also serves as a parish church. In Trafalgar Square stands the earliest monument erected to the memory of Nelson. There are a good many buildings, shops, pleasure grounds, a handsome military parade and exquisite beaches. Pilgrim, the residence of the governor, is a fine mansion about a mile from the city. Fontabelle and Hastings are fashionable suburban watering-places with good sea-bathing. Speighstown (1500) is the only other town of any size.

History.-Opinions differ as to the derivation of the name of the island. It may be the Spanish word for the hanging branches of a vine which strike root in the ground, or the name may have been given from a species of bearded fig-tree. In the 16th-century maps the name is variously rendered St Bernardo, Bernados, Barbudoso, Barnodos and Barnodo. There are more numerous traces of the Carib Indians here than in any other of the Antilles. Barbados is thought to have been first visited by the Portuguese. Its history has some special features, showing as it does the process of peaceful colonization, for the island, acquired without conquest, has never been out of the possession of the British. It was touched in 1605 by the British ship "Olive Blossom," whose crew, finding it uninhabited, took possession in the name of James I.; but the first actual settlement was made in 1625, at the direction of Sir William Courteen under the patent of Lord Leigh, afterwards earl of Marlborough, to whom the island had been granted by the king. Two years later, a compromise having been effected with Lord Marlborough, a grant of the island was obtained by the earl of Carlisle, whose claim was based on a grant, from the king, of all the Caribbean islands in 1624; and in 1628 Charles Wolferstone, a native of Bermuda, was appointed governor. In the same year sixty-four settlers arrived at Carlisle Bay and the present capital was founded. During the Civil War in England many Royalists sought refuge in Barbados, where, under Lord Willoughby (who had leased the island from the earl of Carlisle), they offered stout resistance to the forces of the Commonwealth. Willoughby, however, was ultimately defeated and exiled. After the Restoration, to appease the planters, doubtful as to the title under which they held the estates which they had converted into valuable properties, the proprietary or patent interest was abolished, and the crown took over the government of the island; a duty of 41/2% on all exports being imposed to satisfy the claims of the patentees. In 1684, under the governorship of Sir Richard Dutton, a census was taken, according to which the population then consisted of 20,000 whites and 46,000 slaves. The European wars of the 18th century caused much suffering, as the West Indies were the scene of numerous battles between the British and the French. During this period a portion of the $4\frac{1}{2}$ % duty was returned to the colony in the form of the governor's salary. In the course of the American War of Independence Barbados again experienced great hardships owing to the restrictions placed upon the importation of provisions from the American colonies, and in 1778 the distress became so acute that the British government had to send relief. For three years after the peace of Amiens in 1802 the colony enjoyed uninterrupted calm, but in 1805 it was only saved from falling into the hands of the French by the timely arrival of Admiral Cochrane. Since that date, however, it has remained unthreatened in the possession of the British. The rupture between Great Britain and the United States in 1812 caused privateering to be resumed, the trade of the colony being thereby almost destroyed. This led to an agitation for the repeal of the 41/2% duty, but it was not till 1838 that the efforts to secure this were successful. The abolition of slavery in 1834 was attended by no ill results, the slaves continuing to work for their masters as hired servants, and a period of great prosperity succeeded. The proposed confederation of the Windward Islands in 1876, however, provoked riots, which occasioned considerable loss of life and property, but secured for the people their existence as a separate colony. Hurricanes are the scourge of Barbados, those of 1780, 1831, and 1898 being so disastrous as to necessitate relief measures on the part of the home government.

See Ligon, History of Barbados (1657); Oldmixon, British Empire in America (1741); A Short History of Barbados (1768); Remarks upon the Short History (1768); Poyer, History of Barbados (1808); Capt. Thom. Southey, Chron. Hist. of W. Indies (1827); Schomburgk, History of Barbados (1848); J. H. S. Moxby, Account of a West Indian Sanatorium (1886); N. D. Davis, The Cavaliers and Roundheads of Barbados (1887); J. H. Stark, History and Guide to Barbados (1893); R. T. Hill, Cuba and Porto Rico (1897). For geology, see A. J. Jukes-Browne and J. B. Harrison, "The Geology of Barbados," Quart. Journ. Geol. Soc. London vol. xlvii. (1891), pp. 197-250, vol. xlviii. (1892), pp. 170-226; J. W. Gregory, "Contributions to the Palaeontology and Physical Geology of the West Indies," ibid. vol. li. (1895), pp. 255-310; G. F. Franks and J. B. Harrison, "The Globigerina-marls and Basal Reef-rocks of Barbados," ibid. vol. liv. (1898), pp. 540-555; J. W. Spencer, "On the Geological and Physical Development of Barbados; with Notes on Trinidad," ibid. vol. lviii. (1902), pp. 354-367.

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BARBARA, SAINT, a virgin martyr and saint of the Roman Catholic and Orthodox Eastern Churches, whose festival day is December 4th. Her legend is that she was immured in a tower by her father who was opposed to her marriage; that she was converted to Christianity by a follower of Origen, and that when her father learnt this, he beheaded her. The place of her martyrdom is variously given as Heliopolis, as a town of Tuscany, and as Nicomedia, Bithynia, about the year 235. St Barbara is the patron saint of armourers and gunsmiths, and her protection is sought specially against lightning.

BARBARIAN (Gr. βάρβαρος, the name among the early Greeks for all foreigners. The word is probably onomatopoetic, designed to represent the uncouth babbling of which languages other than their own appeared to the Greeks to consist. Even the Romans were included in the term. The word soon assumed an evil meaning, becoming associated with the vices and savage natures of which they believed their enemies to be possessed. The Romans adopted the word for all peoples other than those under Graeco-Roman influence and domination. It has long become synonymous with a general lack of civilization.

BARBARO, ERMOLAO (HERMOLAUS BARBARUS) (1454-1493), Italian scholar, was born at Venice on the 21st of May 1454. At an early age he was sent to Rome, where he studied under Pomponius Laetus. He completed his education at the university of Padua, where he was appointed professor of philosophy in 1477. Two years later he revisited Venice, but returned to Padua when the

plague broke out in his native city. He was sent on various missions to persons of high rank, amongst them Pope Innocent VIII., by whom he was nominated to the important office of patriarch of Aquileia (1491). The Venetian senate, however, refused to ratify the appointment, which, contrary to the law, he had accepted without first obtaining its sanction. He was banished and forced to resign the patriarchate, under the threat of being punished vicariously by the confiscation of his father's property. Barbarus remained at Rome, in receipt of a small pension from the pontifical government, until his death (probably from the plague) on the 14th of June 1493 (according to some, two years later). He edited and translated a number of classical works, of which the most important were: *Castigationes Plinianae* (1492), in which he boasted of having made 5000 corrections in the text of Pliny's *Natural History*; Themistius' *Paraphrases* of certain works of Aristotle (1480); Aristotle's *Rhetorica* (published in 1544); *Castigationes in Pomponium Melam* (1493).

BARBAROSSA ("Redbeard"), the name given by the Christians to a family of Turkish admirals and sea rovers of the 16th century,—Arouj and Khizr (alias Khair-ed-Din) and Hassan the son of Khair-ed-Din. As late as 1840, Captain Walsin Esterhazy, author of a history of the Turkish rule in Africa, ventured the guess that "Barbarossa" was simply a mispronunciation of Bábá Arouj, and the supposition has been widely accepted. But the prefix Bábá was not applied to Arouj by contemporaries. His name is given in Spanish or Italian form as "Orux" or "Harrach" or "Ordiche." The contemporary Arab chronicle published by S. Rang and F. Denis in 1837 says explicitly that Barbarossa was the name applied by Christians to Khair-ed-Din. It was no doubt a nickname given to the family on account of their red or tawny beards (Lat. barba). The founder of the family was Yakub, a Roumeliot, probably of Albanian blood, who settled in Mitylene after its conquest by the Turks. He was a coasting trader and skipper, and had four sons—Elias, Isaak, Arouj and Khizr, all said to have been born after 1482. Khizr became a potter and Isaak a trader. Elias and Arouj took to sea roving. In an action with a galley of the Knights of Saint John, then established at Rhodes, Elias was killed and Arouj taken prisoner; the latter was ransomed by a Turkish pasha and returned to the sea. For some time he served the Mamelukes who still held Egypt. During the conflict between the Mamelukes and the sultan Selim I., he considered it more prudent to transfer himself to Tunis. The incessant conflicts among the Berber princes of northern Africa gave him employment as a mercenary, which he varied by piratical raids on the trade of the Christians. At Tunis he was joined by Khizr, who took, or was endowed with, the name of Khair-ed-Din. Isaak soon followed his brothers. Arouj and Khair-ed-Din joined the exiled Moors of Granada in raids on the Spanish coast. They also pushed their fortunes by fighting for, or murdering and supplanting, the native African princes. Their headquarters were in the island of Jerba in the Gulf of Gabes. They attempted in 1512 to take Bougie from the Spaniards, but were beaten off, and Arouj lost an arm, shattered by an arquebus shot. In 1514 they took Jijelli from the Genoese, and after a second beating at Bougie in 1515 were called in by the natives of Cherchel and Algiers to aid them against the Spaniards. They occupied the towns and murdered the native ruler who called them in. The Spaniards still held the little rocky island which gives Algiers its name and forms the harbour. In 1518 Arouj was drawn away to take part in a civil war in Tlemçen. He promptly murdered the prince he came to support and seized the town for himself. The rival party then called in the Spaniards, by whom Arouj was expelled and slain while fleeing at the Rio Salado. Khair-ed-Din clung to his possessions on the coast and appealed to the sultan Selim I. He was named beylerbey by the sultan, and with him began the establishment of Turkish rule in northern Africa. For years he was engaged in subduing the native princes, and in carrying on warfare with the Christians. In 1519 he repelled a Spanish attack on Algiers, but could not expel his enemies from the island till 1529. As a combatant in the forefront of the war with the Christians he became a great hero in Islam, and dreaded by its enemies under his name of Barbarossa. In 1534 he seized Tunis, acting as capitan pasha for the sultan Suleiman. The emperor Charles V. intervened on behalf of the native prince, retook the town, and destroyed great part of Barbarossa's fleet. The corsair retaliated by leading what remained of his navy on a plundering raid to the Balearic Islands. During the remainder of his life-till 1547-Barbarossa, though still beylerbey of northern Africa, was mainly engaged as capitan pasha in co-operating with the armies of the sultan Suleiman in the east. He was absent from Algiers when it was attacked by Charles V. in 1541. In 1543-1544 he commanded the fleet which Suleiman sent to the coast of Provence to support Francis I. Barbarossa would not allow the bells of the Christian churches to be rung while his fleet was at anchor in the ports. He plundered the coast of Italy on his way back to Constantinople. When he died in his palace at Constantinople he was succeeded as beylerbey of Africa by his son Hassan. Hassan Barbarossa, like his father, spent most of his life in the Levant, but was occasionally in Africa when the influence of his family was required to suppress the disorders of the Turkish garrisons. He left it for the last time in 1567, and is said by Hammer-Purgstall to have been present at Lepanto in 1571. His last years are obscure.

Authorities.—The History of the Ottoman Empire, by Joseph von Hammer-Purgstall (French translation J. J. Hellert, 1835-1843), contains accounts of the Barbarossas, but requires to be corrected by other authorities. See La Fondation de la régence d'Alger, histoire des Barberousse, chronique arabe du XVI^{ème} siècle published by Sander Rang and Ferdinand Denis, Paris, 1837—for a curious Moslem version of their story. H. D. de Grammont has collected later evidence in his Histoire d'Alger (Paris, 1887); and he discusses the origin of the name in a paper contributed to the Révue Africaine, No. 171. Their campaigns are told in a readable way with the advantage of technical knowledge by Ad. Jurien de la Gravière in Les Corsaires barbaresques et la marine de Soliman le Grand (1887), and Doria et Barberousse (1886). The History of the Maritime Wars of the Turks, by Hajji Khalifa (translated by J. Mitchell for the Oriental Translation Fund, 1831), is said to have been founded on evidence collected by order of the sultan Suleiman.

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BARBAROUX, CHARLES JEAN MARIE (1767-1794), French revolutionist, was educated at first by the Oratorians of Marseilles, then studied law, and became a successful advocate. He was appointed secretary (greffier) to the commune of Marseilles, and in 1792 was commissioned to go to the Legislative Assembly and demand the accusation of the directory of the department of Bouches-du-Rhone, as accomplice in a royalist movement in Arles. At Paris he was received in the Jacobin club and entered into relations with J. P. Brissot and the Rolands. It was at his instigation that Marseilles sent to Paris the battalion of volunteers which contributed to the insurrection of the 10th of August 1792 against the king. Returning to Marseilles he helped to repress a royalist movement at Avignon and an ultra-Jacobin movement at Marseilles, and was elected deputy to the Convention by 775 votes out of 776 voting. From the first he posed as an opponent of the Mountain, accused Robespierre of aiming at the dictatorship (25th of September 1792), attacked Marat, and proposed to break up the commune of Paris. Then he got the act of accusation against Louis XVI. adopted, and in the trial voted for his death "without appeal and without delay." During the final struggle between the Girondists and the Mountain, he refused to resign as deputy and rejected the offer made by the sections of Paris to give hostages for the arrested representatives. He succeeded in escaping, first to Caen, where he organized the civil war, then to Saint-Emilion near Bordeaux, where he wrote his Mémoires, which were published in 1822 by his son, and re-edited in 1866. Discovered, he attempted to shoot himself, but was only wounded, and was taken to Bordeaux, where he was guillotined when his identity was established.

See Ch. Vatel, *Charlotte Corday et les Girondins* (Paris, 1873); A. Aulard, *Les Orateurs de la Législative et de la Convention* (Paris, 2nd ed., 1906).

BARBARY, the general designation of that part of northern Africa bounded E. by Egypt, W. by the Atlantic, S. by the Sahara and N. by the Mediterranean, comprising the states of Morocco, Algeria, Tunisia and Tripoli. The name is derived from the Berbers, the chief inhabitants of the region.

BARBARY APE, a tailless monkey inhabiting Algeria, Morocco, and the rock of Gibraltar (where it may have been introduced), and referable to the otherwise Asiatic group of macaques, in which it alone represents the subgenus *Inuus*. This monkey, *Macacus inuus*, is light yellowish-brown above and yellowish-white below, with the naked part of the face flesh-coloured. It is entirely terrestrial in habits, at least on Gibraltar, and goes about in droves.

BARBARY PIRATES. The coast population of northern Africa has in past ages been addicted to piratical attacks on the shores of Europe opposite. Throughout the decline of the Roman empire, the barbarian invasions, the Mahommedan conquest and the middle ages, mere piracy always existed by the side of the great strife of peoples and religions. In the course of the 14th century, when the native Berber dynasties were in decadence, piracy became particularly flagrant. The town of Bougie was then the most notorious haunt of these "skimmers of the sea." But the savage robber powers which, to the disgrace of Europe, infested the commerce and the coasts, not only of the Mediterranean but even for a time of the ocean; who were not finally suppressed till the 19th century was well advanced; and who are properly known as the Barbary pirates, arose in the 16th century, attained their greatest height in the 17th, declined gradually throughout the 18th and were extinguished about 1830. Isolated cases of piracy have occurred on the Rif coast of Morocco even in our time, but the pirate communities which lived by plunder and could live by no other resource, vanished with the French conquest of Algiers in 1830. They are intimately connected with the general history of northern Africa from about 1492 to their end. The story of the establishment of Turkish rule in northern Africa and of the revolutions of Morocco must be sought under the heads of Turkey, Tripoli, Tunisia, Algeria and Morocco.

In dealing with the pirates, it will be sufficient to note a few leading dates. The conquest of Granada in 1492 by the Catholic sovereigns of Spain drove many Moors into exile. They revenged themselves by piratical attacks on the Spanish coast. They had the help of Moslem adventurers from the Levant, of whom the most successful were Arouj and his brother Khair-ed-Din, natives of Mitylene, both of whom were known to the Christians by the nickname of Barbarossa (q.v.) or "Redbeard." Spain in self-defence began to conquer the coast towns of Oran, Algiers and Tunis. Arouj having fallen in battle with the Spaniards in 1518, his brother Khair-ed-Din appealed to Selim, the sultan of Turkey, who sent him troops. He drove the Spaniards in 1529 from the rocky island in front of Algiers, where they had a fort, and was the founder of the Turkish power. From about 1518 till the death of Uluch Ali in 1587, Algiers was the main seat of government of the beylerbeys of northern Africa, who ruled over Tripoli, Tunisia and Algeria. From 1587 till 1659, they were ruled by Turkish pashas, sent from Constantinople to govern for three years; but in the latter year a military revolt in Algiers reduced the pashas to nonentities. From 1659 onwards, these African cities, though nominally forming parts of the Turkish empire, were in fact anarchical military republics which chose their own rulers and lived by plunder.

It may be pointed out that during the first period (1518-1587) the beylerbeys were admirals of the sultan, commanding great fleets and conducting serious operations of war for political ends. They were slave-hunters and their methods were ferocious, but their Christian enemies were neither more humane nor more chivalrous. After 1587, plunder became the sole object of their successors—plunder of the native tribes on land and of all who went upon the sea. The maritime side of this long-lived brigandage was conducted by the captains, or *reises*, who formed a class or even a corporation. Cruisers were fitted out by capitalists and commanded by the *reises*. Ten per cent of the value of the prizes was paid to the treasury of the pasha or his successors, who bore the titles of Agha or Dey or Bey. Bougie was the chief shipbuilding port and the timber was mainly drawn from the country behind it. Until the 17th century the pirates used galleys, but a

Flemish renegade of the name of Simon Danser taught them the advantage of using sailing ships. In this century, indeed, the main strength of the pirates was supplied by renegades from all parts of Christendom. An English gentleman of the distinguished Buckinghamshire family of Verney was for a time among them at Algiers. This port was so much the most formidable that the name of Algerine came to be used as synonymous with Barbary pirate, but the same trade was carried on, though with less energy, from Tripoli and Tunis—as also from towns in the empire of Morocco, of which the most notorious was Salli. The introduction of sailing ships gave increased scope to the activity of the pirates. While the galleys, being unfit for the high seas, were confined to the Mediterranean and the coast, the sailing vessels ranged into the Atlantic as far as the Canaries or even to Iceland. In 1631 a Flemish renegade, known as Murad Reis, sacked Baltimore in Ireland, and carried away a number of captives who were seen in the slave-market of Algiers by the French historian Pierre Dan.

The first half of the 17th century may be described as the flowering time of the Barbary pirates. More than 20,000 captives were said to be imprisoned in Algiers alone. The rich were allowed to redeem themselves, but the poor were condemned to slavery. Their masters would not in many cases allow them to secure freedom by professing Mahommedanism. A long list might be given of people of good social position, not only Italians or Spaniards, but German or English travellers in the south, who were captives for a time. The chief sufferers were the inhabitants of the coasts of Sicily, Naples and Spain. But all traders belonging to nations which did not pay blackmail in order to secure immunity were liable to be taken at sea. The payment of blackmail, disguised as presents or ransoms, did not always secure safety with these faithless barbarians. The most powerful states in Europe condescended to make payments to them and to tolerate their insults. Religious orders—the Redemptionists and Lazarites—were engaged in working for the redemption of captives and large legacies were left for that purpose in many countries. The continued existence of this African piracy was indeed a disgrace to Europe, for it was due to the jealousies of the powers themselves. France encouraged them during her rivalry with Spain; and when she had no further need of them they were supported against her by Great Britain and Holland. In the 18th century British public men were not ashamed to say that Barbary piracy was a useful check on the competition of the weaker Mediterranean nations in the carrying trade. When Lord Exmouth sailed to coerce Algiers in 1816, he expressed doubts in a private letter whether the suppression of piracy would be acceptable to the trading community. Every power was, indeed, desirous to secure immunity for itself and more or less ready to compel Tripoli, Tunis, Algiers, Salli and the rest to respect its trade and its subjects. In 1655 the British admiral, Robert Blake, was sent to teach them a lesson, and he gave the Tunisians a severe beating. A long series of expeditions was undertaken by the British fleet during the reign of Charles II., sometimes single-handed, sometimes in combination with the Dutch. In 1682 and 1683 the French bombarded Algiers. On the second occasion the Algerines blew the French consul from a gun during the action. An extensive list of such punitive expeditions could be made out, down to the American operations of 1801-5 and 1815. But in no case was the attack pushed home, and it rarely happened that the aggrieved Christian state refused in the end to make a money payment in order to secure peace. The frequent wars among them gave the pirates numerous opportunities of breaking their engagements, of which they never failed to take advantage.

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After the general pacification of 1815, the suppression of African piracy was universally felt to be a necessity. The insolence of a Tunisian squadron which sacked Palma in the island of Sardinia and carried off 158 of its inhabitants, roused widespread indignation. Other influences were at work to bring about their extinction. Great Britain had acquired Malta and the Ionian Islands and had now many Mediterranean subjects. She was also engaged in pressing the other European powers to join with her in the suppression of the slave trade which the Barbary states practised on a large scale and at the expense of Europe. The suppression of the trade was one of the objects of the congress of Vienna. Great Britain was called on to act for Europe, and in 1816 Lord Exmouth was sent to obtain treaties from Tunis and Algiers. His first visit produced diplomatic documents and promises and he sailed for England. While he was negotiating, a number of British subjects had been brutally ill-treated at Bona, without his knowledge. The British government sent him back to secure reparation, and on the 27th of August, in combination with a Dutch squadron under Admiral Van de Capellen, he administered a smashing bombardment to Algiers. The lesson terrified the pirates both of that city and of Tunis into giving up over 3000 prisoners and making fresh promises. But they were not reformed and were not capable of reformation. Algiers renewed its piracies and slave-taking, though on a smaller scale, and the measures to be taken with it were discussed at the conference or congress of Aix-la-Chapelle in 1818. In 1824 another British fleet under Admiral Sir Harry Neal had again to bombard Algiers. The great pirate city was not in fact thoroughly tamed till its conquest by France in 1830.

Authorities.—The *Histoire d'Alger* of H. D. de Grammont (Paris, 1887) is based on original authorities. Sir R. L. Playfair's *Scourge of Christendom* (London, 1884) gives the history of the British consulate in Algiers. The main authorities for the early history of the Barbary states are:—Luis del Marmol Carvajal, *Descripcion de Africa* (Granada, 1573); Diego de Haedo, *Topographia e Historia General de Argel* (Valladolid, 1612); and Père Pierre Dan, *Histoire de Barbarie et de ses corsaires* (Paris, 1637). The readable treatises of Ad. Jurien de la Gravière, all published in Paris, *Doria et Barberousse* (1886), *Les Corsaires barbaresques* (1887), *Les Chevaliers de Malte* (1887), and *La Guerre de Chypre* (1888), deal with the epoch of the beylerbeys and the regular wars. For American work see Gardner Weld Allen, *Our Navy and the Barbary Corsairs* (New York, 1905).

BARBAULD, ANNA LETITIA (1743-1825), English poet and miscellaneous writer, was born at Kibworth-Harcourt, in Leicestershire, on the 20th of June 1743. Her father, the Rev. John Aikin, a Presbyterian minister and schoolmaster, taught his daughter Latin and Greek. In 1758 Mr Aikin removed his family to Warrington, to act as theological tutor in a dissenting academy there. In 1773 Miss Aikin published a volume of Poems, which was very successful, and co-operated with her brother, Dr John Aikin, in a volume of Miscellaneous Pieces in Prose. In 1774 she married Rochemont Barbauld, a member of a French Protestant family settled in England. He had been educated in the academy at Warrington, and was minister of a Presbyterian church at Palgrave, in Suffolk, where, with his wife's help, he established a boarding school. Her admirable Hymns in Prose and Early Lessons were written for their pupils. In 1785 she left England for the continent with her husband, whose health was seriously impaired. On their return about two years later, Mr Barbauld was appointed to a church at Hampstead. In 1802 they removed to Stoke Newington. Mrs Barbauld became well known in London literary circles. She collaborated with Dr Aikin in his Evenings at Home; in 1795 she published an edition of Akenside's Pleasures of Imagination, with a critical essay; two years later she edited Collins's Odes; in 1804 she published a selection of papers from the English Essayists, and a selection from Samuel Richardson's correspondence, with a biographical notice; in 1810 a collection of the British Novelists (50 vols.) with biographical and critical notices; and in 1811 her longest poem, Eighteen Hundred and Eleven, giving a gloomy view of the existing state and future prospects of Britain. This poem anticipated Macaulay in contemplating the prospect of a visitor from the antipodes regarding at a future day the ruins of St Paul's from a broken arch of Blackfriars Bridge. Mrs Barbauld died on the 9th of March 1825; her husband had died in 1808. A collected edition of her works, with memoir, was published by her niece, Lucy Aikin, in 2 vols., 1825.

See A. L. le Breton, *Memoir of Mrs Barbauld* (1874); G. A. Ellis, *Life and Letters of Mrs A. L. Barbauld* (1874); and Lady Thackeray Ritchie, *A Book of Sibyls* (1883).

BARBECUE (Span. *barbacoa*), originally a framework on posts placed over a fire on which to dry or smoke meat; hence, a gridiron for roasting whole animals, and in Cuba an upper floor on which fruit or grain is stored. In the United States the word means an open-air feast, either political or social, where whole animals are roasted and eaten and hogsheads of beer and other vast quantities of food and drink consumed.

BARBED WIRE, a protective variety of fencing, consisting usually of several strands of wire twisted together with sharp spikes or points clinched or fastened into the strands.

In the United States, barbed wire for fencing was originally suggested to meet conditions existing in the western states, by reason of the large cattle-raising industry in sections where timber was scarce. Prior to its introduction, a No. 9 round or oval iron wire was popular on the frontier of the United States and in South America, as a fencing material. Large amounts were used annually for this purpose, but iron lacked strength, and single wire strand was not fully satisfactory on account of stretching in warm and contracting in cold weather, and of thus being broken. Cattle would rub against a smooth fence, and this constant pressure loosened the posts and broke the wire. To overcome this defect, ingenious people—the most successful being farmers—set themselves to find a way by which wire could be used and at the same time be free from destruction by the animals it was intended to confine. This investigation resulted in the invention of barbed wire. Soon after, automatic machinery was invented for rapidly and cheaply placing the barb upon the smooth wire, so that the cost of barbed wire is much less than the cost of smooth wire when it was in general use. So immediately did barbed wire find favour with the farmers of the United States, and, in fact, all over the world, that the manufacture of wire was revolutionized.

The history of barbed wire fencing is of recent date. In the United States—the real home of this industry—patents were taken out by Lucien B. Smith, Kent, Ohio, in 1867; by William B. Hunt, of Scott, N.Y., at almost the same time; and by Michael Kelly, of New York, a year later. The practical beginning of the industry, however, was in the patents issued to Joseph F. Glidden, De Kalb, Ill., 1874, on barbed fence wire, and during the same year, to Joseph F. Glidden and Phineas W. Vaughan, for a machine to manufacture the same. These inventions were the foundation of the system of patents under which barbed wire has been protected and sold. The development of the barbed wire industry would hardly have been possible without steel. Iron wire, used for fencing prior to the introduction of steel, was not suitable, seeing that iron does not possess sufficient tensile strength and lacks homogeneity, qualities which Bessemer and open-hearth steels possess in a high degree.

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The advantages of galvanized barbed wire fencing are that it is almost imperishable, is no burden on the posts; does not oppose the wind with enough surface to rack the posts, thus allowing water to settle around them and rot them; is economical, not only in the comparative cheapness of its first cost but also in the amount of land covered by it; and is effective as a barrier against all kinds of stock and a protection against dogs and wild beasts. Cattle, once discovering what it is, will not press against it, nor even go near it, and thus it becomes an effective means of dividing the farmer's ranch into such fields as he may desire. It is quickly and cheaply constructed, and has the advantage of freedom from harbouring weeds. It affords no impediment to the view. A man can see across his farm, and ascertain what is going on in every portion within the scope of vision, as plainly as if there were no fences. It does not contribute to the formation of snow drifts as do other kinds of efficient fence. This makes it a favourite form of fencing for railroads and along highways. Finally, barbed wire composed of two wires twisted together, once firmly put in place, will retain its taut condition through many seasons without repair. The fact of

the wire being twisted allows it to adapt itself to all the varying temperatures.

The introduction of barbed wire met with some opposition in America on supposed humanitarian grounds, but ample and extended tests, both of the economy and the humanity of the new material, silenced this objection. Now no American farmer, especially in the west, ever thinks of putting any other kind of fencing on his farm, unless it may be the new types of meshed wire field fencing which have been coming so generally into use since 1899. Generally speaking, the use of barbed wire fencing in other countries has not been as extensive as in the western United States. While it has been used on a comparatively large scale in Argentina and Australia, both these countries use a much larger quantity of plain wire fence, and in Argentina there is an important consumption of high-carbon oval fence wire of great strength, which apparently forms the only kind of fence that meets the conditions in a satisfactory manner.

It is interesting to note the largely increased demand for meshed wire field fencing in the more thickly settled-portions of the United States, and along the lines of railway. Beginning with 1899, there has been an annual increase in this demand, owing to the scarcity and high cost of labour, and the discontinuing of the building of rail fences. Meshed wire is considered by many a better enclosure for small animals, like sheep and hogs, than the barbed wire fence. Barbed wire has been popular with railroads, but of late meshed wire fencing has been substituted with advantage, the fabric being made of wires of larger diameter than formerly, to insure greater stability. The popularity of barbed wire is best shown by the following statistics:—

| APPROXIMATE | PRODUCTION | EOD T | HE HAITED | STATES |
|-------------|------------|-------|-----------|---------|
| APPROXIMATE | PRODUCTION | FOR T | HE UNITED | STATES. |

| Year. | Tons barbed wire. | Tons meshed field fencing. |
|-------|-------------------|----------------------------|
| 1874 | 5 | |
| 1875 | 300 | |
| 1876 | 1,500 | |
| 1877 | 7,000 | |
| 1878 | 13,000 | |
| 1879 | 25,000 | |
| 1880 | 40,000 | |
| 1890 | 125,000 | |
| 1900 | 200,000 | 50,000 |
| 1907 | 250,000 | 425,000 |

Barbed wire is usually shipped to customers on wooden spools, each holding approximately 100 lb or 80 to 100 rods. A hole is provided through the centre of the spool for inserting a bar, on which the reel can revolve for unwinding the wire as it is put up. After the wire is stretched in place, it is attached to the wooden posts by means of galvanized steel wire staples, ordinarily made from No. 9 wire. They are cut with a sharp, long, diagonal point and can be easily driven into the posts. On account of the rapid decay and destruction of wooden posts, steel posts have become popular, as also have reinforced concrete posts, which add materially to the durability of the fence. It is essential that barbed wire should be stretched with great care. For this purpose a suitable barbed wire stretcher is necessary.

Barbed wire fencing is now manufactured in various patterns. The general process may be outlined briefly as follows:-The wire is made of soft Bessemer or Siemens-Martin steel, and is drawn in the wire mill in the usual way. Galvanizing is done by a continuous process. The coil of wire to be galvanized is placed on a reel. The first end of the wire is led longitudinally through an annealing medium—either red-hot lead or heated fire-brick tubes—of sufficient length to soften the wire. From the annealing furnace, the wire is fed longitudinally through a bath of muriatic acid, which removes the scale, and from the acid, after a thorough washing in water, the wire passes through a bath of spelter, heated slightly above the melting point. After coming from the spelter and being cooled by water, the wire is wound on suitable take-up blocks into finished coils. From 30 to 60 wires are passing simultaneously in parallel lines through this continuous galvanizing apparatus, thus insuring a large output. The galvanizing gives the wire a bright finish and serves to protect it from the corrosive action of the atmosphere. There is a considerable demand for painted fencing, in the manufacture of which the galvanizing is dispensed with, and the spools of finished barbed wire, as they come from the barbing machine, are submerged in paint and dried. The barbing and twisting together of the two longitudinal strand wires is done by automatic machinery. A brief description of the manufacture of 2 and 4 point Glidden wire is as follows:—Two coils of wire on reels are placed behind the machine, designed to form the main or strand wires of the fence. One of the main wires passes through the machine longitudinally. One or two coils of wire are placed on reels at either side of the machine for making 2 or 4 point wire respectively. These wires are fed into the machine at right angles to the strand wire. At each movement of the feeding mechanism, when fabricating 2 point wire, one cross wire is fed forward. A diagonal cut forms a sharp point on the first end. The wire is again fed forward and instantly wrapped firmly around one strand wire and cut off so as to leave a sharp point on the incoming wire as before, while the bit of pointed wire cut off remains as a double-pointed steel barb attached firmly to the strand wire. This wire armed with barbs at regular intervals passes on through a guide, where it is met by a second strand wire—a plain wire without barbs. The duplex strand wires are attached to a take-up reel, which is caused to revolve and take up the finished barbed wire simultaneously and in unison with the barbing machine. In this way the strand wires are loosely twisted into a 2-ply strand, armed with barbs projecting at right angles in every direction.

When once started, the operation of barbed wire making is continuous and rapid. The advantage of two strands is the automatic adjustment to changes of temperature. When heat expands the strands, the twist simply loosens without causing a sag, and when cold contracts them, the twist tightens, all without materially altering the relative lengths of the combined wires. A barbed wire machine produces from 2000 to 3000 lb of wire per day of ten hours.

In some American states, the use of barbed wire is regulated by law, but as a rule these laws apply to placing barbed wire on highways. Others prohibit the use of barbed wire fencing to indicate the property line between different owners, unless both agree to its use. In some states the use of barbed wire is prohibited unless it has a top rail of lumber.

Barbed wire is also employed in connexion with "obstacles" in field fortifications, especially in what are known as "high wire entanglements." Pointed stakes or "pickets," 4 ft. high, are planted in rows and secured by ordinary wire to holdfasts or pegs in the ground. Each picket is connected to all around it, top and bottom, by lengths of barbed wire.

In England, where the use of barbed wire has also become common, the Barbed Wire Act 1893 enacted that, where there is on any land adjoining a highway within the county or district of a local authority, a fence which is made with barbed wire (*i.e.* any wire with spikes or jagged projections), or in which barbed wire has been placed, and where such barbed wire may probably be injurious to persons or animals lawfully using the highway, the local authority may require the occupier of the land to abate the nuisance by serving notice in writing upon him. If the occupier fails to do so within the specified time, the local authority may apply to a court of summary jurisdiction, and such court, if satisfied that the barbed wire is a nuisance, may by summary order direct the occupier to abate it, and on his failure to comply with the order within a reasonable time, the local authority may execute it and recover in a summary manner from the occupier the expenses incurred.

BARBEL (*Barbus vulgaris*), a fish of the Cyprinid family, which is an inhabitant of the rivers of central Europe, and is very locally distributed in England. It has four barbels (Lat. *barba*, beard; fleshy appendages hanging from the mouth), and the first ray of the short dorsal fin is strong, spine-like and serrated behind. It attains a weight of 50 lb on the continent of Europe. The genus of which it is the type is a very large one, comprising about 300 species from Europe, Asia and Africa, among which is the mahseer or mahaseer, the great sporting fish of India.

BARBÉ-MARBOIS, FRANÇOIS, Marquis de (1745-1837), French politician, was born at Metz. He began his public career as intendant of San Domingo under the old régime. At the close of 1789 he returned to France, and then placed his services at the disposal of the revolutionary government. In 1791 he was sent to Regensburg to help de Noailles, the French ambassador, in the negotiations with the diet of the Empire concerning the possessions of German princes in Alsace and Lorraine. Suspected of treason, he was arrested on his return but set at liberty again. In 1795 he was elected to the Council of the Ancients, where the general moderation of his attitude, especially in his opposition to the exclusion of nobles and the relations of émigrés from public life, brought him under suspicion of being a royalist, though he pronounced a eulogy on Bonaparte for his success in Italy. At the coup d'état of the 18th Fructidor (September 4) 1797, he was arrested and transported to French Guiana. Transferred to Oléron in 1799, he owed his liberty to Napoleon, after the 18th Brumaire. In 1801 he became councillor of state and director of the public treasury, and in 1802 a senator. In 1803 he negotiated the treaty by which Louisiana was ceded to the United States, and was rewarded by the First Consul with a gift of 152,000 francs. In 1805 he was made grand officer of the legion of honour and a count, and in 1808 he became president of the cour des comptes. In return for these favours, he addressed Napoleon with servile compliments; yet in 1814 he helped to draw up the act of abdication of the emperor, and declared to the cour des comptes, with reference to the invasion of France by the allies, "united for the most beautiful of causes, it is long since we have been so free as we now are in the presence of the foreigner in arms." In June 1814, Louis XVIII. named him peer of France and confirmed him in his office as president of the cour des comptes. Deprived of his positions by Napoleon during the Hundred Days he was appointed minister of justice in the ministry of the duc de Richelieu (August 1815). In this office he tried unsuccessfully to gain the confidence of the ultra-royalists, and withdrew at the end of nine months (May 10, 1816).

In 1830, when Louis Philippe assumed the reins of government, Barbé-Marbois went, as president of the *cour des comptes*, to compliment him and was confirmed in his position. It was the sixth government he had served and all with servility. He held his office until April 1834, and died on the 12th of February 1837. He published various works, of which may be mentioned: *Réflexions sur la colonie de Saint-Domingue* (1794), *De la Guyane, &c.* (1822), an *Histoire de la Louisiane et la cession de cette colonie par la France aux États-Unis, &c.* (1828), and the story of his transportation after the 18th Fructidor in *Journal d'un déporté non jugé*, 2 vols. (1834).

BARBER (from Lat. *barba*, beard), one whose occupation it is to shave or trim beards, a hairdresser. In former times the barber's craft was dignified with the title of a profession, being conjoined with the art of surgery. In France the barber-surgeons were separated from the perruquiers, and incorporated as a distinct body in the reign of Louis XIV. In England barbers first received incorporation from Edward IV. in 1461. By 32 Henry VIII. c. 42, they were united with the company of surgeons, it being enacted that the barbers should confine themselves to the minor operations of blood-letting and drawing teeth, while the surgeons were prohibited from

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"barbery or shaving." In 1745 barbers and surgeons were separated into distinct corporations by 18 George II. c. 15. The barber's shop was a favourite resort of idle persons; and in addition to its attraction as a focus of news, a lute, viol, or some such musical instrument, was always kept for the entertainment of waiting customers. The barber's sign consisted of a striped pole, from which was suspended a basin, symbols the use of which is still preserved. The fillet round the pole indicated the ribbon for bandaging the arm in bleeding, and the basin the vessel to receive the blood.

See also Beard, and Annals of the Barber Surgeons of London (1890).

BARBERINI, the name of a powerful Italian family, originally of Tuscan extraction, who settled in Florence during the early part of the 11th century. They acquired great wealth and influence, and in 1623 Maffeo Barberini was raised to the papal throne as Urban VIII. He made his brother, Antonio, a distinguished soldier, and two nephews, cardinals, and gave to a third nephew, Taddeo, the principality of Palestrina. Great jealousy of their increasing power was excited amongst the neighbouring princes, and Odoardo Farnese, duke of Parma, made war upon Taddeo, and defeated the papal troops. After the death of Urban in 1644 his successor, Innocent X., showed hostility to the Barberini family. Taddeo fled to Paris, where he died in 1647, and with him the family became extinct in the male line. His daughter Cornelia married Prince Giulio Cesare Colonna di Sciarra in 1728, who added her name to his own. On the death of Prince Enrico Barberini-Colonna the name went to his daughter and heiress Donna Maria and her husband Marquis Luigi Sacchetti, who received the title of prince of Palestrina and permission to bear the name of Barberini. The fine Barberini palace and library in Rome give evidence of their wealth and magnificence. The ruthless way in which they plundered ancient buildings to adorn their own palaces is the origin of the saying, "Quod non fecerunt barbari, fecerunt Barberini."

See A. von Reumont, Geschichte der Stadt Rom (Berlin, 1868), iii. b. 611-612, 615, 617, &c.; Almanach de Gotha (Gotha, 1902); J. H. Douglas, The Principal Noble Families of Rome (Rome, 1905).

BARBERRY (*Berberis vulgaris*), a shrub with spiny-toothed leaves, which on the woody shoots are reduced to forked spines, and pale yellow flowers in hanging racemes, which are succeeded by orange-red berries. It is a member of the botanical natural order *Berberidaceae*, and contains about 100 species in the north temperate zone and in the Andes of South America extending into Patagonia. The order is nearly allied to the buttercup order in having the parts of the flowers all free and arranged in regular succession below the ovary which consists of only one carpel. It is distinguished by having the sepals, petals and stamens in multiples of 2, 3 or 4, never of 5. The berries of *Berberis* are edible; those of the native barberry are sometimes made into preserves. The alkaloid berberine (q.v.) occurs in the roots.

BARBERTON, a town of the Transvaal, 283 m. by rail (175 m. in a direct line) E. of Pretoria and 136 m. W.N.W. of Delagoa Bay. Pop. (1904) 2433, of whom 1214 were whites. Barberton lies 2825 ft. above the sea and is built on the side of a valley named De Kaap, from a bold headland of the Drakensberg which towers above it. The chief town of a district of the same name, it owes its existence to the discovery of gold in the Kaap valley, and dates from 1886. There are several fine public buildings grouped mainly round President Square. The town is connected with the Lourenço Marques-Pretoria trunk railway by a branch line, 35 m. long, which runs N.E. through fine mountainous country and joins the main line at Kaapmuiden. During the war of 1899-1902 the Boers were driven out of Barberton (13th of September 1900) by General (afterwards Sir John) French.

BARBETTE (Fr. diminutive of *barbe*, a beard), a platform inside a fortification raised sufficiently high for artillery placed thereon to be able to fire *en barbette*, *viz.* over the top of the parapet; also in warships a raised platform, protected by armour on the sides, upon which guns are mounted *en barbette*.

BARBEY D'AUREVILLY, JULES AMÉDÉE (1808-1889), French man of letters, was born at Saint-Sauveur-le-Vicomte (Manche) on the 2nd of November 1808. His most famous novels are Une Vieille Maîtresse (1851), attacked at the time of its publication on the charge of immorality; L'Ensorcelée (1854), an episode of the royalist rising among the Norman peasants against the first republic; the Chevalier Destouches (1864); and a collection of extraordinary stories entitled Les Diaboliques (1874). Barbey d'Aurevilly is an extreme example of the eccentricities of which the Romanticists were capable, and to read him is to understand the discredit that fell upon the manner. He held extreme Catholic views and wrote on the most risqué subjects, he gave himself aristocratic airs and hinted at a mysterious past, though his parentage was entirely bourgeois and his youth very hum-drum and innocent. In the 'fifties d'Aurevilly became literary critic of the Pays, and a number of his essays, contributed to this and other journals, were collected as Les Œuvres et les hommes du XIXe siècle (1861-1865). Other literary studies are Les Romanciers (1866) and Goethe et Diderot (1880). He died in Paris on the 23rd of April 1889. Paul Bourget describes him as a dreamer with an exquisite sense of vision, who sought and found in his work a refuge from the uncongenial world of every day. Jules Lemaître, a less sympathetic critic, finds in the extraordinary crimes of his heroes and heroines, his reactionary views, his dandyism and snobbery, an exaggerated Byronism.

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See also Alcide Dusolier, *Jules Barbey d'Aurevilly* (1862), a collection of eulogies and interviews; Paul Bourget, Preface to d'Aurevilly's *Memoranda* (1883); Jules Lemaître, *Les Contemporains*; Eugène Grelé, *Barbey d'Aurevilly, sa vie et son œuvre* (1902); René Doumic, in the *Revue des*

deux mondes (Sept. 1902).

BARBEYRAC, JEAN (1674-1744), French jurist, the nephew of Charles Barbeyrac, a distinguished physician of Montpellier, was born at Beziers in Lower Languedoc on the 15th of March 1674. He removed with his family into Switzerland after the revocation of the edict of Nantes, and there studied jurisprudence. After spending some time at Geneva and Frankfort-on-Main, he became professor of belles-lettres in the French school of Berlin. Thence, in 1711, he was called to the professorship of history and civil law at Lausanne, and finally settled as professor of public law at Groningen. He died on the 3rd of March 1744. His fame rests chiefly on the preface and notes to his translation of Pufendorf's treatise De Jure Naturae et Gentium. In fundamental principles he follows almost entirely Locke and Pufendorf; but he works out with great skill the theory of moral obligation, referring it to the command or will of God. He indicates the distinction, developed more fully by Thomasius and Kant, between the legal and the moral qualities of action. The principles of international law he reduces to those of the law of nature, and combats, in so doing, many of the positions taken up by Grotius. He rejects the notion that sovereignty in any way resembles property, and makes even marriage a matter of civil contract. Barbeyrac also translated Grotius's De Jure Belli et Pacis, Cumberland's De Legibus Naturae, and Pufendorf's smaller treatise De Officio Hominis et Civis. Among his own productions are a treatise, De la morale des pères, a history of ancient treaties contained in the Supplément au grand corps diplomatique, and the curious Traité du jeu (1709), in which he defends the morality of games of chance.

BARBICAN (from Fr. *barbacane*, probably of Arabic or Persian origin), an outwork for the defence of a gate or drawbridge; also a sort of pent-house or construction of timber to shelter warders or sentries from arrows or other missiles.

BARBIER, ANTOINE ALEXANDRE (1765-1825), French librarian and bibliographer, was born on the 11th of January 1765 at Coulommiers (Seine-et-Marne). He took priest's orders, from which, however, he was finally released by the pope in 1801. In 1794 he became a member of the temporary commission of the arts, and was charged with the duty of distributing among the various libraries of Paris the books that had been confiscated during the Revolution. In the execution of this task he discovered the letters of Huet, bishop of Avranches, and the MSS. of the works of Fénelon. He became librarian successively to the Directory, to the Conseil d'État, and in 1807 to Napoleon, from whom he carried out a number of commissions. He produced a standard work in his *Dictionnaire des ouvrages anonymes et pseudonymes* (4 vols., 1806-1809; 3rd edition 1872-1879). Only the first part of his *Examen critique des dictionnaires historiques* (1820) was published. He had a share in the foundation of the libraries of the Louvre, of Fontainebleau, of Compiègne and Saint-Cloud; under Louis XVIII. he became administrator of the king's private libraries, but in 1822 he was deprived of all his offices. Barbier died in Paris on the 5th of December 1825.

See also a notice by his son, Louis Barbier, and a list of his works prefixed to the 3rd edition of the *Dict. des ouvrages anonymes et pseudonymes*.

BARBIER, HENRI AUGUSTE (1805-1882), French dramatist and poet, was born in Paris on the 29th of April 1805. Inspired by the revolution of July he poured forth a series of eager, vigorous poems, denouncing, crudely enough, the evils of the time. They are spoken of collectively as the Iambes (1831), though the designation is not strictly applicable to all. As the name suggests, they are modelled on the verse of André Chénier. They include La Curée, La Popularité, L'Idole, Paris, Dante, Quatre-vingt-treize and Varsovie. The rest of Barbier's poems are forgotten, and when, in 1869, he received the long delayed honour of admission to the Academy, Montalembert expressed the general sentiment in his Barbier? mais il est mort! It was even asserted, though without foundation, that he was not the real author of the Iambes. He died at Nice on the 13th of February 1882. He collaborated with Léon de Wailly in the libretto of Berlioz's opera, Benvenuto Cellini, and his works include two series of poems on the political and social troubles of Italy and England, printed in later editions of Iambes et poèmes.

See also Sainte-Beuve, Portraits Contemporains, vol. ii.

BARBIER, LOUIS, known as the ABBÉ DE LA RIVIÈRE (1593-1670), French bishop, was born of humble parents in Vaudelaincourt, near Compiègne. He entered the church and made his way by his wit and cleverness, until he was appointed tutor, and then became the friend and adviser, of Gaston d'Orléans, brother of Louis XIII. He thus gained an entrance to the court, became grand almoner of the queen, and received the revenue of rich abbeys. In March 1655 he was named bishop of Langres, but he spent his time at court, where his wit was always in demand, and where he gained great sums by gambling. He died very rich.

BARBIERI, GIOVANNI FRANCESCO (otherwise called Guercino, from his squinting), (1591-1666), Italian historical painter, was born at Cento, a village not far from Bologna. His artistic powers were developed very rapidly, and at the age of seventeen he was associated with Benedetto Gennari (1550-1610), a well-known painter of the Bolognese school. The fame of the young painter spread beyond his native village, and in 1615 he removed to Bologna, where his paintings were much admired. His first style was formed after that of the Caracci; but the strong colouring and shadows employed by Caravaggio made a deep impression on his mind, and for a considerable period his productions showed evident traces of that painter's influence. Some of his latest pieces approach rather to the manner of his great contemporary Guido, and are painted with more lightness and clearness. Guercino was esteemed very highly in his lifetime, not only by

the nobles and princes of Italy, but by his brother artists, who placed him in the first rank of painters. He was remarkable for the extreme rapidity of his execution; he completed no fewer than 106 large altar-pieces for churches, and his other paintings amount to about 144. His most famous piece is thought to be the St Petronilla, which was painted at Rome for Gregory XV. and is now in the Capitol. In 1626 he began his frescoes in the Duomo at Piacenza. Guercino continued to paint and teach up to the time of his death in 1666. He had amassed a handsome fortune by his labours. His life, by J. A. Calvi, appeared at Bologna in 1808.

His brother, Paolo Antonio Barbieri (1603-1649), was a celebrated painter of still life and animals. He chose for his subjects fruits, flowers, insects and animals, which he painted after nature with a lively tint of colour, great tenderness of pencil, and a strong character of truth and life.

BARBITON, or Barbitos (Gr. βάρβιτον or βάρβιτος; Lat. barbitus; Pers. barbat, barbud), an ancient stringed instrument known to us from the Greek and Roman classics, but derived from Persia. Theocritus (xvi. 45), the Sicilian poet, calls it an instrument of many strings, i.e. more than seven, which was by the Hellenes accounted the perfect number, as in the cithara of the best period. Anacreon, [1] (a native of Teos in Asia Minor) sings that his barbitos only gives out erotic tones. Pollux (Onomasticon iv. chap. 8, § 59) calls the instrument barbiton or barymite (from $\beta\alpha\rho\dot{\nu}$, heavy and $\mu\dot{\nu}$, a string), an instrument producing deep sounds; the strings were twice as long as those of the pectis and sounded an octave lower. Pindar (in Athen. xiv. p. 635), in the same line wherein he attributes the introduction of the instrument into Greece to Terpander, tells us one could magadize, i.e. play in two parts at an interval of an octave on the two instruments. The word barbiton was frequently used for the lyre itself. Although in use in Asia Minor, Italy, Sicily, and Greece, it is evident that the barbiton never won for itself a place in the affections of the Greeks of Hellas; it was regarded as a barbarian instrument affected by those only whose tastes in matters of art were unorthodox. It had fallen into disuse in the days of Aristotle, [2] but reappeared under the Romans.

In spite of the few meagre shreds of authentic information extant concerning this somewhat elusive instrument, it is possible nevertheless to identify the barbiton as it was known among the Greeks and Romans. From the Greek writers we know that it was an instrument having some feature or features in common with the lyre, which warranted classification with it. From the Persians and Arabs we learn that it was a kind of rebab or lute, or a chelys-lyre, [3] first introduced into Europe through Asia Minor by way of Greece, and centuries later into Spain by the Moors, amongst whom it was in the 14th century known as al-barbet. [4] There is a stringed instrument, as yet unidentified by name, of which there are at least four different representations in sculpture, [5] which combines the characteristics of both lyre and rebab, having the vaulted back and gradual narrowing to form a neck which are typical of the rebab and the stringing of the lyre. In outline it resembles a large lute with a wide neck, and the seven strings of the lyre of the best period, or sometimes nine, following the decadent lyre. Most authors in reproducing these sculptures showing the barbiton represent the instrument as boat-shaped and without a neck, as, for instance, Carl Engel. This is due to the fact that the part of the instrument where neck joins body is in deep shadow, so that the correct outline can hardly be distinguished, being almost hidden by hand on one side and drapery on the other.

The barbiton, as pictured here, had probably undergone considerable modification at the hands of the Greeks and had diverged from the archetype. The barbiton, however, although it underwent many changes, retained until the end the characteristics of the instruments of the Greek lyre whose strings were plucked, whereas the rebab was sounded by means of the bow at the time of its introduction into Europe. At some period not yet determined, which we can but conjecture, the barbat approximated to the form of the large lute (q.v.). An instrument called barbiton was known in the early part of the 16th^[6] and during the 17th century. It was a kind of theorbo or bass-lute, but with one neck only, bent back at right angles to form the head. Robert Fludd^[7] gives a detailed description of it with an illustration:-"Inter quas instrumenta non nulla barbito simillima effinxerunt cujus modi sunt illa quae vulgo appellantur theorba, quae sonos graviores reddunt chordasque nervosas habent." The people called it theorbo, but the scholar having identified it with the instrument Louvre, "Achilles of classic Greece and Rome called it barbiton. The barbiton had nine pairs of at Scyros." gut strings, each pair being in unison. Dictionaries of the 18th century support



Barbiton, from a

Fludd's use of the name barbiton. G. B. Doni^[8] mentions the barbiton, defining it in his index as Barbitos seu major chelys italice tiorba, and deriving it from lyre and cithara in common with testudines, tiorbas and all tortoiseshell instruments. Claude Perrault, [9] writing in the 18th century, states that "les modernes appellent notre luth barbiton" (the moderns call our lute barbiton). Constantijn Huygens^[10] declares that he learnt to play the barbiton in a few weeks, but took two years to learn the cittern.

The barbat was a variety of rebab (q.v.), a bass instrument, differing only in size and number of strings. This is quite in accordance with what we know of the nomenclature of musical instruments among Persians and Arabs, with whom a slight deviation in the construction of an instrument called for a new name. [11] The word barbud applied to the barbiton is said to be derived^[12] from a famous musician living at the time of Chosroes II. (A.D. 590-628), who excelled in playing upon the instrument. From a later translation of part of the same authority into

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German^[13] we obtain the following reference to Persian musical instruments: "Die Sänger stehen bei seinem Gastmahl; in ihrer Hand Barbiton^(i.) und Leyer^(ii.) und Laute^(iii.) und Flöte^(iv.) und Deff (Handpauke)." Mr Ellis, of the Oriental Department of the British Museum, has kindly supplied the original Persian names translated above, *i.e.* (i.) *barbut*, (ii.) *chang*, (iii.) *rubāb*, (iv.) *nei*. The barbut and rubab thus were different instruments as late as the 19th century in Persia. There were but slight differences if any between the archetypes of the pear-shaped rebab and of the lute before the application of the bow to the former—both had vaulted backs, body and neck in one, and gut strings plucked by the fingers.

(K. S.)

- [1] See Bergk's *Poetae Lyrici Graeci* (4th ed., 1882), p. 291, fr. 143 [113]; and p. 311, 23 [1], 3; and 14 [9], 34, p. 306.
- [2] *Polit.* viii. (v.), 6, ed. Susemihl-Hicks (1894), pp. 604 (= 1341a 40) and 632; Daremberg and Saglio, *Dict. d'ant. gr. et rom.*, article "Lyre," p. 1450, for a few more references to the classics.
- [3] Johnson's Persian-Arabic-English dictionary: *barbat*, a harp or lute, *barbatzan*, player upon lute, pl.*barābit*; G. W. Freytag, *Lexicon Arabico-Latinum*, i. p. 102; *barbat* (Persian and Arabic), barbitus, genus testudinis, plerumque sex septamve chordis instructum (rotundam habet formam in Africa); *Lexicon Aegidii Forcellini* (Prato, 1858; "Barbito aurataque chely ac doctis fidibus personare" (Martianus Capella i. 36); G. B. Doni, *Lyra Barberina*, ii. index.
- [4] Enumeration of Arab Musical Instruments, xiv. c.
- [5] (a) See C. Clarac, *Musée du Louvre*, vol. i. pl. 202, No. 261. (b) Accompanying illustration. See also Kathleen Schlesinger, "Orchestral Instruments", part ii., "Precursors of the Violin Family," fig. 108 and p. 23, pp. 106-107, fig. 144 and appendix. (c) Sarcophagus in the cathedral of Girgenti in Sicily, illustrated by Carl Engel, *Early History of the Violin Family*, p. 112. A cast is preserved in the sepulchral basement at the British Museum. Domenico, *Lo Faso Pietra-Santa, le antichità della Sicilia* (Palermo, 1834), vol. 3, pl. 45 (2), text p. 89. (d) C. Zoega, *Antike Basreliefe von Rom* (Giessen, 1812), atlas, pl. 98, sarcophagus representing a scene in the story of Hippolytus and Phaedra.
- [6] In Jacob Locher's *Navis Stultifera* (Basil, 1506), titulus 7, is an illustration of a small harp and lute with the legend *nec cytharum tangit nec barbiton*.
- [7] Historia Utriusque Cosmi (Oppenheim, 1617), tom. i. tract ii. part ii. lib. iv. cap. i. p. 226.
- [8] Lyra Barberina, vol. ii. index, and also vol. i. p. 29.
- [9] "La Musique des anciens," Œuvres complètes (ed. Amsterdam, 1727), tom. i. p. 306.
- [10] De Vita propria sermonum inter liberos libri duo (Haarlem, 1817). See also Edmund van der Straeten, La Musique aux Pays-Bas, vol. ii. p. 349.
- [11] See *The Seven Seas*, a dictionary and grammar of the Persian language, by Ghazi uddin Haidar, king of Oudh, in seven parts (Lucknow, 1822) (only the title of the book is in English). A review of this book in German with copious quotations by von Hammer-Purgstall is published in *Jahrbücher der Literatur* (Vienna, 1826), Bd. 35 and 36; names of musical instruments, Bd. 36, p. 292 et seq. See also R. G. Kiesewetter, *Die Musik der Araber, nach Originalquellen dargestellt* (Leipzig, 1843, p. 91, classification of instruments).
- [12] The Seven Seas, part i. p. 153; Jahrb. d. Literatur, Bd. 36, p. 294.
- [13] Fr. Rückert, Grammatik, Poetik und Rhetorik der Perser, nach dem 7^{ten} Bde. des Hefts Kolzum (Gotha, 1874), p. 80.

BARBIZON, a French village, near the forest of Fontainebleau, which gave its name to the "Barbizon school" of painters, whose leaders were Corot, Rousseau, Millet and Daubigny, together with Diaz, Dupré, Jacque, Français, Harpignies and others. They put aside the conventional idea of "subject" in their pictures of landscape and peasant life, and went direct to the fields and woods for their inspiration. The distinctive note of the school is seen in the work of Rousseau and of Millet, each of whom, after spending his early years in Paris, made his home in Barbizon. Unappreciated, poor and neglected, it was not until after years of struggle that they attained recognition and success. They both died at Barbizon-Rousseau in 1867 and Millet in 1875. It is difficult now to realize that their work, so unaffected and beautiful, should have been so hardly received. To understand this, it is necessary to remember the conflicts that existed between the classic and romantic schools in the first half of the 19th century, when the classicists, followers of the tradition of David, were the predominant school. The romantic movement, with Géricault, Bonington and Delacroix, was gaining favour. In 1824 Constable's pictures were shown in the Salon, and confirmed the younger men in their resolution to abandon the lifeless pedantry of the schools and to seek inspiration from nature. In those troubled times Rousseau and Millet unburdened their souls to their friends, and their published lives contain many letters, some extracts from which will express the ideals which these artists held in

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common, and show clearly the true and firmly-based foundation on which their art stands. Rousseau wrote, "It is good composition when the objects represented are not there solely as they are, but when they contain under a natural appearance the sentiments which they have stirred in our souls.... For God's sake, and in recompense for the life He has given us, let us try in our works to make the manifestation of life our first thought: let us make a man breathe, a tree really vegetate." And Millet-"I try not to have things look as if chance had brought them together, but as if they had a necessary bond between themselves. I want the people I represent to look as if they really belonged to their station, so that imagination cannot conceive of their ever being anything else. People and things should always be there with an object. I want to put strongly and completely all that is necessary, for I think things weakly said might as well not be said at all, for they are, as it were, deflowered and spoiled—but I profess the greatest horror for uselessness (however brilliant) and filling up. These things can only weaken a picture by distracting the attention toward secondary things." In another letter he says—"Art began to decline from the moment that the artist did not lean directly and naively upon impressions made by nature. Cleverness naturally and rapidly took the place of nature, and decadence then began.... At bottom it always comes to this: a man must be moved himself in order to move others, and all that is done from theory, however clever, can never attain this end, for it is impossible that it should have the breath of life." The ideas of the "Barbizon school" only gradually obtained acceptance, but the chief members of it now rank among the greater artists of their time.

See D. Croal Thomson, *The Barbizon School* (1891), with a full list of the French authorities to be consulted; Jules Breton, *Nos peintres du siècle*, Paris, 1900.

BARBON, NICHOLAS (c. 1640-1698), English economist, probably the son of Praise-god Barbon, was born in London, studied medicine at Leiden, graduated M.D. at Utrecht in 1661, and was admitted an honorary fellow of the College of Physicians in 1664. He took a considerable part in the rebuilding of London after the great fire of 1666, and has a claim to be considered the institutor of fire-insurance in England, which he started somewhere about 1680. He was M.P. for Bramber in 1690 and 1695. He founded a land bank which, according to contemporaries, was fairly successful and was united with that of John Briscoe in 1696. He died in 1698. His writings are interesting as expressing views much in advance of his time and very near akin to those of modern times on such important topics as value, rent and foreign trade. The more important were Apology for the Builder; or a Discourse showing the Cause and Effects of the Increase of Building (1685); A Discourse of Trade (1690); and A Discourse Concerning Coining the New Money Lighter (1696).

BARBON (BAREBONE or BAREBONES), PRAISE-GOD (c. 1596-1679), English leather-seller and Fifth Monarchy man, was admitted freeman of the Leathersellers Company on the 20th of January 1623 and liveryman on the 13th of October 1634. About the same time he became minister to a congregation which assembled at his own house, "The Lock and Key," in Fleet Street, where his preaching attracted large audiences. The exact nature of his religious opinions is not perfectly clear. He is styled by his enemies a Brownist and Anabaptist, i.e. probably Baptist, but he wrote two books in support of paedobaptism, and his congregation had separated from a larger one of Baptists on that point of controversy. Later he belonged to the sect of Fifth Monarchy men. He was the object of the abuse and ridicule of the opposite party, and his meetings were frequently disturbed by riots. On the 20th of December 1641 his house was stormed by a mob and he narrowly escaped with his life. Barbon, who was a man of substantial property, was summoned by Cromwell on the 6th of June 1653 as a member for London to the assembly of nominees called after him in derision Barebone's Parliament. His name is occasionally mentioned, but he appears to have taken no part in the debates. In 1660 he showed great activity in endeavouring to prevent the Restoration. He published Needham's book, News from Brussels in a Letter from a Near Attendant on His Majesty's Person ..., which retailed unfavourable anecdotes relating to Charles's morals, and on the 9th of February he presented the petition to the Parliament, which proposed that all officials should abjure the Stuarts, and all publicly proposing the Restoration should be deemed guilty of high treason. His conduct drew upon him several royalist attacks. On the 31st of March he was obliged to sign an engagement to the council not to disturb the peace, and on the 26th of November 1661 he was arrested, together with John Wildman and James Harrington, and was imprisoned in the Tower till the 27th of July 1662, when he was released on bail. Barbon, who was married, was buried on the 5th of January 1680. He was the author of A Discourse tending to prove ... Baptism ... to be the ordinance of Jesus Christ. As also that the Baptism of Infants is warentable (1642), the preface of which shows a spirit of wide religious tolerance; and A Reply to the Frivolous and Impertinent answer of R. B. and E. B. to the Discourse of P. B. (1643).

BARBOUR, JOHN (? 1316-1395), Scottish poet, was born, perhaps in Aberdeenshire, early in the 14th century, approximately 1316. In a letter of safe-conduct dated 1357, allowing him to go to Oxford for study, he is described as archdeacon of Aberdeen. He is named in a similar letter in 1364 and in another in 1368 granting him permission to pass to France, probably for further study, at the university of Paris. In 1372 he was one of the auditors of exchequer, and in 1373 a clerk of audit in the king's household. In 1375 (he gives the date, and his age as 60) he composed his best known poem *The Brus*, for which he received, in 1377, the gift of ten pounds, and, in 1378, a life-pension of twenty shillings. Additional rewards followed, including the renewal of his exchequer auditorship (though he may have continued to enjoy it since his first appointment) and ten pounds to his pension. The only biographical evidence of his closing years is his signature as a witness to sundry deeds in the "Register of Aberdeen" as late as 1392. According to the obit-

book of the cathedral of Aberdeen, he died on the 13th of March 1395. The state records show that his life-pension was not paid after that date.

Considerable controversy has arisen regarding Barbour's literary work. If he be the author of the five or six long poems which have been ascribed to him by different writers, he adds to his importance as the father of Scots poetry the reputation of being one of the most voluminous writers in Middle English, certainly the most voluminous of all Scots poets.

- (1) The Brus, in twenty books, and running to over 13,500 four-accent lines, in couplets, is a narrative poem with a purpose partly historical, partly patriotic. It opens with a description of the state of Scotland at the death of Alexander III. (1286) and concludes with the death of Douglas and the burial of the Bruce's heart (1332). The central episode is the battle of Bannockburn. Patriotic as the sentiment is, it is in more general terms than is found in later Scots literature. The king is a hero of the chivalric type common in contemporary romance; freedom is a "noble thing" to be sought and won at all costs; the opponents of such freedom are shown in the dark colours which history and poetic propriety require; but there is none of the complacency of the merely provincial habit of mind. The lines do not lack vigour; and there are passages of high merit, notably the oft-quoted section beginning "A! fredome is a noble thing." Despite a number of errors of fact, notably the confusion of the three Bruces in the person of the hero, the poem is historically trustworthy as compared with contemporary verse-chronicle, and especially with the Wallace of the next century. No one has doubted Barbour's authorship of the Brus, but argument has been attempted to show that the text as we have it is an edited copy, perhaps by John Ramsay, a Perth scribe, who wrote out the two extant texts, preserved in the Advocates' library, Edinburgh, and in the library of St John's College, Cambridge. Extensive portions of the poem have been incorporated by Wyntoun (q.v.) in his Chronicle. The first printed edition extant is Charteris's (Edinburgh, 1571); the second is Hart's (Edinburgh, 1616).
- (2) Wyntoun speaks (*Chronicle* III. iii.) of a "Treteis" which Barbour made by way of "a genealogy" of "Brutus lynagis"; and elsewhere in that poem there are references to the archdeacon's "Stewartis Oryginale." This "Brut" is unknown; but the reference has been held by some to be to (3) a Troy-book, based on Guido da Colonna's *Historia Destructionis Troiae*. Two fragments of such a work have been preserved in texts of Lydgate's *Troy-book*, the first in MS. Camb. Univ. Lib. Kk. v. 30, the second in the same and in MS. Douce 148 in the Bodleian library, Oxford. This ascription was first made by Henry Bradshaw, the librarian of Cambridge University; but the consensus of critical opinion is now against it. Though it were proved that these Troy fragments are Barbour's, there remains the question whether their identification with the book on the Stewart line is justified. The scale of the story in these fragments forces us to doubt this identification. They contain 595 + 3118 = 3713 lines and are concerned entirely with "Trojan" matters. This would be an undue allowance in a Scottish "genealogy."
- (4) Yet another work was added to the list of Barbour's works by the discovery in the university library of Cambridge, by Henry Bradshaw, of a long Scots poem of over 33,000 lines, dealing with *Legends of the Saints*, as told in the *Legenda Aurea* and other legendaries. The general likeness of this poem to Barbour's accepted work in verse-length, dialect and style, and the facts that the lives of English saints are excluded and those of St Machar (the patron saint of Aberdeen) and St Ninian are inserted, made the ascription plausible. Later criticism, though divided, has tended in the contrary direction, and has based its strongest negative judgment on the consideration of rhymes, assonance and vocabulary (see bibliography). That the "district" of the author is the north-east of Scotland cannot be doubted in the face of a passage such as this, in the fortieth legend (St Ninian), 11, 1359 et seq.

"A lytil tale 3et herd I tel, bat in to my tyme befel, of a gudman, in murrefe [Moray] borne in elgyne [Elgin], and his kine beforne, and callit was a faithful man vith al bame bat hyme knew than; & pis mare trastely I say, for I kend hyme weile mony day. John balormy ves his name, a man of ful gud fame."

But whether this north-east Scots author is Barbour is a question which we cannot answer by means of the data at present available.

- (5) If Barbour be the author of the *Legends*, then (so does one conclusion hang upon another) he is the author of a Gospel story with the later life of the Virgin, described in the prologue to the *Legends* and in other passages as a book "of the birth of Jhesu criste" and one "quhare-in I recordit the genology of our lady sanct Mary."
- (6) In recent years an attempt has been made to name Barbour as the author of the *Buik of Alexander* (a translation of the *Roman d'Alexandre* and associated pieces, including the *Vœux du Paon*), as known in the unique edition, c. 1580, printed at the Edinburgh press of Alexander Arbuthnot. The "argument" as it stands is nothing more than an exaggerated inference from parallel-passages in the *Bruce* and *Alexander*; and it makes no allowance for the tags, epithets and general vocabulary common to all writers of the period. Should the assumption be proved to be correct, and should it be found that the "*Troy fragments* were written first of all, followed by

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Alexander and Bruce or Bruce and Alexander, and that the Legends end the chapter," it will be by "evidence" other than that which has been produced to this date.

For Barbour's life see *Exchequer Rolls of Scotland*, ii. and iii.; *Registrum Episcopatus Aberdonensis* (Spalding Club); Rymer's *Foedera*.

WORKS.—(1) The Brus MSS, and early editions u.s. Modern editions: J. Pinkerton, 3 vols. (1790) (called by the editor "the first genuine edition," because printed from the Advocates' Library text, but carelessly); Jamieson (1820); Cosmo Innes (Spalding Club, 1856); W. W. Skeat (Early English Text Society, 1870-1889; reprinted, after revision by the editor, by the Scottish Text Society, 1893-1895). On the question of the recension of Barbour's text, see J. T. T. Brown, The Wallace and The Bruce restudied (Bonn, 1900). (2 and 3) Troy Fragments. C. Horstmann has printed the text in his Legendensammlung (ut infra). See Bradshaw, Transactions of the Cambridge Antiquarian Society (1866); the prolegomena in Horstmann's edition; Skeat, Brus (S. T. S. edit. u.s. pp. xlvi. et seq.); Köppel, "Die Fragmente von Barbours Trojanerkrieg," in Englische Studien, x. 373; Panton and Donaldson, The Gest Historiale of the Destruction of Troye (E. E. T. S. pt. ii. Introd. pp. x. et seq.); G. Neilson (ut infra); and I. T. T. Brown (ut supra) passim. (4) Legends of the Saints. C. Horstmann, who upholds Barbour's authorship, has printed the text in his Barbours des schottischen Nationaldichters Legendensammlung nebst den Fragmenten seines Trojanerkrieges, 2 vols. (Heilbronn, 1881-1882), and that of the legend of St Machor in his Altenglische Legenden. Neue Folge (Heilbronn, 1881) pp. 189-208. A later edition by W. M. Metcalfe, who disputes Barbour's claim, appeared in 1896 (Legends of the Saints in the Scottish Dialect of the Fourteenth Century, 3 vols., Scottish Text Society). See the introductions to these editions; also Skeat and Koppel u.s., and P. Buss, Sind die von Horstmann herausgegebenen schottischen Legenden ein Werk Barberes? (Halle, 1886) (cf. Anglia, ix. 3, 1886). (5) For the Gospel-story evidence see Metcalfe, u.s. I. xxix. (6) On the Alexander Book and its assumed relationships, see G. Neilson, *John Barbour, Poet and Translator* (1900) (a reprint from the *Transactions of the Philological Society*); J. T. T. Brown *u.s.*, "Postscript," pp. 156-171; and Athenaeum, 17th of November, 1st and 8th December 1900, and the 9th of February 1901.

(G. G. S.)

BARBUDA, an island in the British West Indies. It lies 25 m. N. of Antigua, of which it is a dependency, in 17° 33′ N. and 61° 43′ W., and it has an area of 62 sq. m. Pop. (1901) 775. It is flat and densely wooded. On the western side there is a large lagoon, separated from the sea by a spit of sand. The part of the island under cultivation is very fertile, and the air is remarkable for its purity. Cattle and horses are bred and wild deer are still found. Salt and phosphates of lime are exported. The island was annexed by Great Britain in 1628 and was bestowed in 1680 upon the Codrington family who, for more than 200 years, held it as a kind of feudal fief.

BARBY, a town of Germany, in the kingdom of Prussia, on the left bank of the Elbe, 82 m. S.W. of Berlin on the direct railway to Cassel. Pop. (1900) 5136. It has two evangelical churches and a seminary for school teachers, which is housed in the former castle of the lords of Barby. The industries are mainly agricultural, but there are sugar factories and breweries. Here from 1749 to 1809 was a settlement of the Herrnhut evangelical brotherhood.

BARCA (mod. Merj), an ancient city founded in the territory of Cyrene in the middle of the 6th century B.C. Rising quickly to importance it became a rival of the older city, and gave its name to the western province of the latter's territory. The name as a provincial designation is still in occasional use, but is now applied to all the province of Bengazi. Barca is said to have owed its origin to Greek refugees flying from the tyranny of Arcesilaus II. (see Cyrene), but it is certain that it was rather a Libyan than a Greek town at all times. A Persian force invited by the notorious Pheretima, mother of Arcesilaus III., in revenge for Barcan support of a rival faction, sacked it towards the close of the 6th century and deported a number of its inhabitants to Bactria. Under Ptolemaic rule it began to decline, like Cyrene, and its port Ptolemais (Tolmeita) took its place: but after the Arab conquest (A.D. 641) it became the chief place of the Cyrenaica for a time and a principal station on the Kairawan road. Though now a mere village, Merj is still the chief centre of administration inland, and has a fort and small garrison. No ruins of earlier period than the late Roman and early Arab seem to be visible on the site. The latter lies, like Cyrene, about ten miles from the coast on the crest of Jebel Akhdar, here sunk to a low downland. It owed its early prosperity to its easy access to the sea, and to the fact that natural conditions in Cyrenaica and the Sahara behind it, tend to divert trade to the west of the district a fact which is exemplified by the final survival of Berenice (mod. Bengazi). Merj stands in a rich but ill-cultivated stretch of red soil.

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(D. G. H.)

BARCAROLE, or Barcarolle (Ital. *barcaruola*, a boat-song) properly a musical term for the songs sung by the Venetian gondoliers, and hence for an instrumental or vocal composition, generally in 6-8 time, written in imitation of their characteristic rhythm.

BARCELONA, a maritime province of north-eastern Spain, formed in 1833 out of districts belonging to the ancient kingdom of Catalonia, and bounded on the N.E. and E. by Gerona; S. by the Mediterranean Sea; S.W. by Tarragona; and W. and N.W. by Lérida. Pop. (1900) 1,054,541; area 2968 sq. m. Apart from a few tracts of level country along the coast and near Igualada, Manresa, Sabadell and Vich, almost the whole surface consists of mountain ranges, often densely wooded, rich in minerals and intersected by deep ravines. These ranges are outliers of the Pyrenees, which extend along the northern frontier, forming there the lofty Sierra del Cadi with

the peak of Tosa (8317 ft.). Towards the sea, the altitudes become gradually less, although not with a uniform decrease; for several isolated peaks and minor ranges such as Montserrat and Monseny rise conspicuously amid the lower summits to a height of 4000-6000 ft. The central districts are watered by the Llobrégat, which rises at the base of the Sierra del Cadi, and flows into the sea near Barcelona, the capital, after receiving many small tributaries. The river Ter crosses the eastern extremity of the province.

Barcelona can be divided into three climatic zones; a temperate one near the sea, where even palm and orange trees grow; a colder one in the valleys and plains, more inland; and a colder still among the mountains, where not a few peaks are snow-clad for a great part of the year. Agriculture and stock-keeping are comparatively unimportant in this province, which is the centre of Spanish industry and commerce. In every direction the country looks like a veritable hive of human activity and enterprise, every town and village full of factories, and alive with the din of machinery. Lead, zinc, lignite, coal and salt are worked, and there are numerous mineral springs; but the prosperity of the province chiefly depends on its transit trade and manufactures. These are described in detail in articles on the chief towns. Barcelona (pop. 1900, 533,000), Badalona (19,240), Cardona (3855), Igualada (10,442), Manresa (23,252), Mataró (19,704), Sabadell (23,294), Tarrasa (15,956), Vich (11,628) and Villanueva y Geltru (11,856). Berga (5465), perhaps the Roman Castrum Bergium, on the Llobrégat, is the home of the Catalonian cotton industry. None of the rivers is navigable, and the roads are in general indifferent and insufficient. The province is better off in regard to railways, of which there are 349 m. Important lines radiate from the city of Barcelona north-east along the coast to Gerona and to Perpignan in France; south-west along the coast to Tarragona and Valencia; and west to Saragossa and Madrid. Several local railways link together the principal towns. For a general description of the people, and for the history of this region see Catalonia. The population is greater and increases more rapidly than that of any other Spanish province, a fact due not to any large excess of births over deaths, but to the industrial life which attracts many immigrants. In the last quarter of the 19th century the increase exceeded 200,000, while the average yearly number of emigrants was below 2000. In point of education this province is quite among the first in Spain, and as far back as 1880 there were 97,077 children enrolled on the school registers; the figures have since steadily increased.

BARCELONA, formerly the capital of Catalonia, and since 1833 the capital of the province of Barcelona in eastern Spain, in 41° 23′ N. and 2° 11′ E., on the Mediterranean Sea, and at the head of railways from Madrid, Saragossa, and Perpignan in France. Pop. (1900) 533,000. Barcelona is a flourishing city and the principal seaport of Spain. It is built on the sloping edge of a small plain between the rivers Besós, on the north, and Llobrégat, on the south. Immediately to the south-west the fortified hills of Montjuich rise to an altitude of 650 ft., while the view is bounded on the west by the heights which culminate in Tibidabo (1745 ft.), and on the north-east by the Montañas Matas. The greater part of the space thus enclosed is occupied by comparatively modern suburbs and gardens of almost tropical luxuriance, strongly contrasting with the huge factories and busy port of the original city in their midst.

Barcelona was formerly surrounded by a strong line of ramparts, and defended, or more correctly, overawed by a citadel on the north-east, erected in 1715 by Philip V.; but these fortifications being felt as a painful restriction on the natural development of the city, were, in spite of the opposition of the central government, finally abolished by the local authorities in 1845. The walls of the moat were utilized for the cellars of the houses which soon occupied the site of the ramparts, and the ground, which had been covered by the citadel, was laid out in gardens. A rapid extension of the city to the north-west took place, and in 1860 an elaborate plan for the laying out of new districts received the royal sanction. Barcelona thus comprises an old town, still consisting for the most part of irregular and narrow streets, and a new town built with all the symmetry and precision of a premeditated scheme. The buildings of the old town are chiefly of brick, from four to five storeys in height, with flat roofs, and other oriental peculiarities; while in the new town hewn stone is very largely employed, and the architecture is often of a modern English style. To the east, on the tongue of land that helps to form the port, lies the suburb of Barceloneta. It owes its origin to the marquis de la Mina, who, about 1754, did much for the city, and is regularly laid out, the houses being built of brick after a uniform pattern. The main street or axis of the old town is the Rambla, which has a fine promenade planted with planetrees running down the middle, and contains the principal hotels and theatres of the city. The most important suburbs are Grácia, Las Corts de Sarriá, Horta, San Andrés de Palomar, San Gervasio de Cassolas, San Martin de Provensals and Sans. Exclusive of these, the city contains about 334,000 inhabitants, an increase of nearly 150,000 since 1857. Large numbers of immigrant artisans joined the population during the latter half of the 19th century, attracted by the great development of industry. Barcelona is the see of a bishop, and, like most Spanish towns, has a large number of ecclesiastical buildings, though by no means so many as it once possessed. No fewer than eighteen convents were still standing in 1873. The cathedral, erected between 1298 and 1448 on Monte Taber, an oval hill which forms the highest point of the Rambla, is one of the finest examples of Spanish Gothic; although it is not designed on a great scale and some parts have been freely modernized. It contains the early 14th-century tomb of Santa Eulalia, the patron saint of the city, besides many other monuments of artistic or historical interest. Its stained glass windows are among the finest in Spain, and it possesses archives of great value. Santa Maria del Mar, Santa Ana, Santos Justo y Pastor, San Pedro de las Puellas, and San Pablo del Campo are all churches worthy of mention.

The educational institutions of Barcelona have from an early period been numerous and

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important. The university (Universidad Literaria), which was originally founded in 1430 by the magistracy of the city, and received a bull of confirmation from Pope Nicholas V. in 1450, possessed at that time four faculties and thirty-one chairs all endowed by the corporation. It was suppressed in 1714, but restored in 1841, and now occupies an extensive building in the new town. There are, besides, an academy of natural sciences, a college of medicine and surgeryconfirmed by a bull of Benedict XIII. in 1400-an academy of fine arts, a normal school, a theological seminary, an upper industrial school, an institution for the education of deaf-mutes, a school of navigation and many minor establishments. Gratuitous instruction of a very high order is afforded by the Board of Trade to upwards of 2000 pupils. The principal charitable foundations are the Casa de Caridad or house of charity, the hospital general, dating from 1401, and the foundling hospital. The principal civic and commercial buildings are the Casa Consistorial, a fine Gothic hall (1369-1378), the Lonja or exchange (1383), and the Aduana or custom-house (1792). At the seaward end of the Rambla is a large ancient structure, the Atarazanas or Arsenals, which was finished about 1243, and partly demolished in the 19th century to give a better view to the promenade. Remains of the former royal state of Barcelona are found in the Palacio Real of the kings of Aragon and the Palacio de la Reina. At the highest part of the city, in the Calle del Paradis, are some magnificent columns, and other Roman remains, which, however, are hidden by the surrounding buildings. Means of public recreation are abundantly supplied. There are many theatres, the two most important being the Teatro Principal, and the Teatro del Liceo, a very fine building, originally erected in 1845 on the site of a convent of Trinitarian monks. The number of restaurants and similar places of evening resort is very great, and there are several public courts where the Basque game of pelota can be witnessed.

The so-called port of Barcelona was at first only an open beach, on the east, slightly sheltered by the neighbouring hills, but at an early period the advantage of some artificial protection was felt. In 1438 Don Alphonso V. granted the magistracy a licence to build a mole; and in 1474 the Moll de Santa Creu was officially begun. Long after this, however, travellers speak of Barcelona as destitute of a harbour; and it is only in the 17th century that satisfactory works were undertaken. Until modern times all the included area was shut off from the open sea by a sand-bank, which rendered the entrance of large vessels impossible. An extension of the former mole, and the construction of another from the foot of Montjuich, have embraced a portion of the sea outside of the bank, and a convenient shelter is thus afforded for the heaviest battleships. From 1873 the work of extension and improvement was carried on systematically, with the addition of new quays, greater storage room, and better means for handling cargo. After thirty years of steady development, further plans were approved in 1903. At this time the port included an inner harbour, with a depth of 18 to 30 ft. at low tide, and an outer harbour with a depth of 20 to 35 ft. In the following year 8075 vessels of nearly 5,000,000 tons entered the port. Barcelona is well supplied with inland communication by rail, and the traffic of its streets is largely facilitated by tramway lines running from the port as far as Grácia and the other chief suburbs.

Barcelona has long been the industrial and commercial centre of eastern Spain—a pre-eminence which dates from the 12th and 13th centuries. It received a temporary check from the disasters of the Spanish-American War of 1898; but less than a year later it paid about £550,000 in industrial and commercial taxes, or more than 11% of the whole amount thus collected in the kingdom; and within five years it had become a port of regular call for thirty-five important shipping companies. It also contained the head offices of thirteen other lines, notably those of the Transatlantic Mail Company, which possessed a fleet of twenty-five fine steamships. Trades and industries give occupation to more than 150,000 hands of both sexes. The spinning and weaving of wool, cotton and silk are the principal industries, but the enterprising spirit of the Catalans has compelled them to try almost every industry in which native capital could attempt to compete with foreign, especially since the institution of the protectionist tariffs of 1892. The native manufacturers are quite able to compete in peninsular markets with foreign rivals. This prosperity has been in part due to the great development of means of communication around the city and in the four Catalan provinces. Comestibles, raw materials, and combustibles form the greater part of the imports, but this great manufactory also imports a considerable quantity of foreign manufactured goods. The principal exports are wines, cereals, olive-oil, cotton goods, soap, cigarette-paper, furniture and barrels, boots, shoes and leather goods, and machinery.

Barcino, the ancient name of the city, is usually connected with that of the Carthaginian Hamilcar Barca, its traditional founder in the 3rd century B.C. After the Roman conquest, it received from Augustus (27 B.C.-A.D. 14) the name of Julia Faventia (afterwards Augusta and Pia), with the status of a Roman colony; and thenceforward it rapidly grew to be the leading mart of the western Mediterranean, rivalling Tarraco (Tarragona) and Massilia (Marseilles) as early as the 2nd century A.D. As its remains testify, the Roman city occupied Monte Taber. The bishopric of Barcelona was founded in 343. In 415 and 531, the Visigoths chose Barcelona as their temporary capital; in 540 and 599 church councils were held there. Barcinona or Bardjaluna, as it was then called, was captured by the Moors in 713, and in 801 it passed, with the rest of Catalonia, under the dominion of the Franks. From 874 the counts of Barcelona ruled as independent monarchs. But the accession of larger resources due to the union between Catalonia and Aragon in 1149, brought the city to the zenith of its fame and wealth. Its merchant ships vied with those of Genoa, Venice and Ragusa, trading as far west as the North Sea and the Baltic, and as far east as Alexandria. In 1258 James I. of Aragon empowered Barcelona to issue its famous Consulado del Mar, a code of maritime law recognized as authoritative by many European states. Consuls represented Barcelona at the principal commercial centres on or near the Mediterranean; and the city was among the first communities to adopt the practice of marine insurance. But the union of Castile and Aragon in 1479 favoured other cities of Spain at the expense of Barcelona,

whose commercial supremacy was transferred to the ports of western Spain by the discovery of America in 1492. The citizens attributed their misfortunes to the "Castilian" government, and a strong party among them favoured annexation by France. In 1640 Barcelona was the centre of the Catalonian rebellion against Philip IV., and threw itself under French protection. In 1652 it returned to its allegiance, but was captured by the duke of Vendôme in 1697. At the peace of Ryswick, in the same year, it was restored to the Spanish monarchy. During the War of the Succession (1701-1714) Barcelona adhered to the house of Austria. The seizure of Montjuich in 1705, and the subsequent capture of the city by the earl of Peterborough, formed one of his most brilliant achievements. In 1714 it was taken after an obstinate resistance by the duke of Berwick in the interests of Philip V., and at the close of the war was reluctantly reconciled to the Bourbon dynasty. In 1809 the French invaders of Spain obtained possession of the fortress and kept the city in subjection until 1814. Since then it has shared in most of the revolutionary movements that have swept over Spain, and has frequently been distinguished by the violence of its civic commotions. For the historic antagonism between the Catalans and the other inhabitants of Spain was strengthened by the industrial development of Barcelona. Among the enterprising and shrewd Catalans, who look upon their rulers as reactionary, and reserve all their sympathies for the Provençal neighbours whom they so nearly resemble in race, language and temperament, French influence and republican ideals spread rapidly; taking the form partly of powerful labour and socialist organizations, partly of less reputable bodies, revolutionary and even anarchist. Strikes are very common, seventy-three having occurred in such a year of comparative quiet as 1903; but the causes of disturbance are almost as often political as economic, and the annals of the city include a long list of revolutionary riots and bomb outrages. A strange contrast is presented by the co-existence of these turbulent elements with the more old-fashioned Spanish society of Barcelona. Church festivals, civic and ecclesiastical processions are almost as animated and picturesque as in Seville itself; and many medieval customs continue to flourish side by side with the most modern features of industrial life, giving to Barcelona a character altogether unique among Spanish cities.

The literature relating to Barcelona is extensive. For a general description of the city, see A. A. P. Arimon, *Barcelona antigua y moderna*, two illustrated folio volumes (Madrid, 1850); and J. Artigas y Feiner, *Guia itineraria de Barcelona* (Barcelona, 1888). For the antiquities, see S. Sampere, *Topografia antigua de Barcelona* (1890). The economic history of the city is dealt with by A. Capmany in his *Memorias historicas sobra la marina, comercio, y artes de la antigua ciudad de Barcelona* (Madrid, 1779-1792); and, for its political history, the same work should be consulted, together with *Historias e conquestas dels comtes de Barcelona*, by T. Tomich (Barcelona, 1888), and the *Colecció de documents inédits del Arxin municipal de la ciutat de Barcelona* (Barcelona, 1892). The spread of the revolutionary movement is traced by M. Gil Maestre, in his *El Anarquismo en España, y el especial de Barcelona* (Madrid, 1897), and in his *La Criminalidad en Barcelona* (Barcelona, 1886).

BARCELONA, a town and port of Venezuela, capital of the state of Bermudez, on the Neveri river, 3 m. from its mouth and 12 m. by rail from the port of Guanta, which has superseded the incommodious river port in the trade of this district. Pop. (est. 1904) 13,000. Built on the border of a low plain and having a mean annual temperature of 82° F., the town has the reputation of being unhealthy. There are salt works and important coal deposits in its vicinity, the latter at Naricual and Capiricual, 12 m. distant by rail. Though the adjacent country is fertile, its prosperity has greatly declined, and the exports of coffee, sugar, cacao and forest products are much less important than formerly. The town dates from 1637, when it was located at the foot of the Cerro Santo and was called Nueva Barcelona; it reached a state of much prosperity and commercial importance before the end of the century. The War of Independence, however, and the chronic political disorders that followed nearly ruined its industries and trade.

BARCELONNETTE, a town in the department of Basses-Alpes, in the S.E. of France. Pop. (1906) 2075. It is built at a height of 3717 ft. on the right bank of the Ubaye river, on which it is the most important place. It is situated in a wide and very fertile valley, and is surrounded by many villas, built by natives who have made their fortune in Mexico, and are locally known as *les Américains*. The town itself is mainly composed of a long street (flanked by two others), which is really the road from Grenoble to Cuneo over the Col de l'Argentière (6545 ft.). The only remarkable buildings in the town are a striking clock-tower of the 15th century (the remains of a Franciscan convent) and the Musée Chabrand, which contains a very complete collection of birds, both European and extra-European.

Refounded in 1231 by Raymond Bérenger IV., count of Provence (he was of the family of the counts of Barcelona, whence the name of the town he rebuilt), Barcelonnette passed to Savoy in 1388 (formal cession in 1419), and in 1713 by the treaty of Utrecht was ceded to France in exchange for the valleys of Exilles, Fénestrelles, and Château Dauphin (Casteldelfino). It was the birth-place of J. A. Manuel (1775-1827), the well-known Liberal orator at the time of the Restoration of 1815, after whom the principal square of the town is named.

See F. Arnaud, Barcelonnette et ses environs (Guide du C. A. F.) (1898), and La Vallée de Barcelonnette (1900).

(W. A. B. C.)

BARCLAY, ALEXANDER (c. 1476-1552), British poet, was born about 1476. His nationality is matter of dispute, but William Bulleyn, who was a native of Ely, and probably knew him when he was in the monastery there, asserts that he was born "beyonde the cold river of Twede";

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moreover, the spelling of his name and the occasional Scottish words in his vocabulary point to a northern origin. His early life was spent at Croydon, but it is not certain whether he was educated at Oxford or Cambridge. It may be presumed that he took his degree, as he uses the title of "Syr" in his translation of Sallust, and in his will he is called doctor of divinity. From the numerous incidental references in his works, and from his knowledge of European literature, it may be inferred that he spent some time abroad. Thomas Cornish, suffragan bishop in the diocese of Bath and Wells, and provost of Oriel College, Oxford, from 1493 to 1507, appointed him chaplain of the college of St Mary Ottery, Devonshire. Here he translated Sebastian Brant's *Ship of Fools*, and even introduced his neighbours into the satire:—

"For if one can flatter, and beare a Hauke on his fist, He shall be parson of Honington or Cist."

The death of his patron in 1513 apparently put an end to his connexion with the west, and he became a monk in the Benedictine monastery of Ely. In this retreat he probably wrote his eclogues, but in 1520 "Maistre Barkleye, the Blacke Monke and Poete" was desired to devise "histoires and convenient raisons to florisshe the buildings and banquet house withal" at the meeting between Henry VIII. and Francis I. at the Field of the Cloth of Gold. He at length became a Franciscan monk of Canterbury. It is presumed that he conformed with the change of religion, for he retained under Edward VI. the livings of Great Baddow, Essex, and of Wokey, Somerset, which he had received in 1546, and was presented in 1552 by the dean and chapter of Canterbury to the rectory of All Hallows, Lombard Street, London. He died shortly after this last preferment at Croydon, Surrey, where he was buried on the 10th of June 1552. All the evidence in Barclay's own work goes to prove that he was sincere in his reproof of contemporary follies and vice, and the gross accusations which John Bale^[1] brings against his moral character may be put down to his hatred of Barclay's cloth.

The Ship of Fools was as popular in its English dress as it had been in Germany. It was the starting-point of a new satirical literature. In itself a product of the medieval conception of the fool who figured so largely in the Shrovetide and other pageants, it differs entirely from the general allegorical satires of the preceding centuries. The figures are no longer abstractions; they are concrete examples of the folly of the bibliophile who collects books but learns nothing from them, of the evil judge who takes bribes to favour the guilty, of the old fool whom time merely strengthens in his folly, of those who are eager to follow the fashions, of the priests who spend their time in church telling "gestes" of Robin Hood and so forth. The spirit of the book reflects the general transition between allegory and narrative, morality and drama. The Narrenschiff of Sebastian Brant was essentially German in conception and treatment, but his hundred and thirteen types of fools possessed, nevertheless, universal interest. It was in reality sins and vices, however, rather than follies that came under his censure, and this didactic temper was reflected in Barclay. The book appeared in 1494 with woodcuts said to have been devised and perhaps partly executed by Brant himself. In these illustrations, which gave an impulse to the production of "enblems" and were copied in the English version, there appears a humour quite absent from the text. In the Latin elegiacs of the Stultifera Navis (1497) of Jacob Locher the book was read throughout Europe. Barclay's The Shyp of Folys of the Worlde was first printed by Richard Pynson in 1509. He says he translated "oute of Laten, Frenche, and Doche," but he seems to have been most familiar with the Latin version. He used a good deal of freedom in his translation, "sometyme addynge, sometyme detractinge and takinge away suche thinges as semeth me necessary and superflue." The fools are given a local colour, and Barclay appears as the unsparing satirist of the social evils of his time. At the end of nearly every section he adds an envoi of his own to drive home the moral more surely. The poem is written in the ordinary Chaucerian stanza, and in language which is more modern than the common literary English of his day.

Certayne Ecloges of Alexander Barclay, Priest, written in his youth, were probably printed as early as 1513, although the earliest extant edition is that in John Cawood's reprint (1570) of the Ship of Fools. They form, with the exception of Henryson's Robin and Makyn, the earliest examples of the English pastoral. The first three eclogues, in the form of dialogues between Coridon and Cornix, were borrowed from the Miseriae Curialium of Aeneas Sylvius Piccolomini (Pope Pius II.), and contain an eulogy of John Alcock, bishop of Ely, the founder of Jesus College, Cambridge. The fourth is based on Mantuan's ecloque, De consuetudine divitum erga poetas, with large additions. It contains the "Descrypcion of the towre of Virtue and Honour," an elegy on Sir Edward Howard, lord high admiral of England, who perished in the attack on the French fleet in the harbour of Brest in 1513. The fifth, printed by Wynkyn de Worde, also without date, is entitled the "Fyfte Eglog of Alexandre Barclay of the Cytezen and the uplondyshman" and is also based on Mantuan. Two shepherds, Amintas and Faustus, discuss the familiar theme of the respective merits of town and country life, and relate a quaint fable of the origin of the different classes of society. Barclay's pastorals contain many pictures of rustic life as he knew it. He describes for instance the Sunday games in the village, football, and the struggle for food at great feasts; but his ecloques were, like his Italian models, also satires on social evils. The shepherds are rustics of the Colin Clout type, and discuss the follies and corruptions around them. Barclay had, however, no sympathy with the anti-clerical diatribes of John Skelton, whom he more than once attacks. Bale mentions an Anti-Skeltonum which is lost. His other works are: -The Castell of Laboure (Wynkyn de Worde, 1506), from the French of Pierre Gringoire; the Introductory to write and to pronounce Frenche (Robert Copland, 1521); The Myrrour of Good Maners (Richard Pynson, not dated), a translation of the De quatuor virtutibus of Dominicus

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Mancinus; Cronycle compyled in Latyn by the renowned Sallust (Richard Pynson, no date), a translation of the Bellum Jugurthinum, The Lyfe of the glorious Martyr Saynt George (R. Pynson, c. 1530). The Lyfe of Saynte Thomas, and Haython's Cronycle, both printed by Pynson, are also attributed to Barclay, but on very doubtful grounds.

See T. H. Jamieson's edition of the *Ship of Fools* (Edinburgh, 1874), which contains an account of the author and a bibliography of his works; and J. W. Fairholt's edition of *The Cytezen and Uplondyshman* (Percy Soc. 1847), which includes large extracts from the other eclogues; also Zarncke's edition of Brant (Leipzig, 1854); and Dr Fedor Fraustadt, *Über das Verhältnis von Barclays Ship of Fools zu den lateinischen, französischen und deutschen Quellen* (1894). A prose version of Locher's *Stultifera Navis*, by Henry Watson, was printed by Wynkyn de Worde in 1518.

[1] Script. Ill. Maj. Brit. (1557, Cent. ix. No. 66).

BARCLAY, JOHN (1582-1621), Scottish satirist and Latin poet, was born, on the 28th of January 1582, at Pont-à-Mousson, where his father William Barclay held the chair of civil law. His mother was a Frenchwoman of good family. His early education was obtained at the Jesuit College. While there, at the age of nineteen, he wrote a commentary on the Thebaid of Statius. In 1603 he crossed with his father to London. Barclay had persistently maintained his Scottish nationality in his French surroundings, and probably found in James's accession an opportunity which he would not let slip. He did not remain long in England, where he is supposed to have published the first part of his Satyricon, for in 1605 when a second edition of that book appeared in Paris, he was there, having already spent some time in Angers, and being now the husband of a French girl, Louise Debonaire. He returned to London with his wife in 1606, and there published his Sylvae, a collection of Latin poems. In the following year the second part of the Satyricon appeared in Paris. Barclay remained on in London till 1616. In 1609 he edited the De Potestate Papae, an anti-papal treatise by his father, who had died in the preceding year, and in 1611 he issued an Apologia or "third part" of the Satyricon, in answer to the attacks of the Jesuits and others who were probably embittered by the tone of the earlier parts of the satire. A so-called "fourth part," with the title of Icon Animorum, appeared in 1614. James I. is said to have been attracted by his scholarship, but particulars of this, or of his life in London generally, are not available. In 1616 he went to Rome, for some reason unexplained, and there resided till his death on the 15th of August 1621. He appears to have been on better terms with the Church and notably with Bellarmine; for in 1617 he issued, from a press at Cologne, a Paraenesis ad Sectarios, an attack on the position of Protestantism. The literary effort of his closing years was his best-known work the Argenis, completed about a fortnight before his death, which has been said to have been hastened by poison. The romance was printed in Paris in the same year.

Barclay's contemporary reputation as a writer was of the highest; by his strict scholarship and graceful style he has deserved the praise of modern students. The Satyricon, a severe satire on the Jesuits, is modelled on Petronius and catches his lightness of touch, though it shows little or nothing of the tone of its model, or of the unhesitating severity and coarseness of the humanistic satire of Barclay's age. The Argenis is a long romance, with a monitory purpose on the dangers of political intrigue, probably suggested to him by his experiences of the league in France, and by the catholic plot in England after James's accession. The work has been praised by all parties; and it enjoyed for more than a century after his death a remarkable popularity. Most of the innumerable editions are supplied with a key to the characters and names of the story. Thus Aneroëtus is Clement VIII; Arx non eversa is the Tower of London; Hippophilus and Radirobanes are the names of the king of Spain; Hyanisbe is Queen Elizabeth; Mergania, by an easy anagram, is Germany; Usinulca, by another, is Calvin. The book is of historical importance in the development of 17th century romance, including especially Fénelon's Télémague. Ben Jonson appears, from an entry at Stationers' Hall on the 2nd of October 1623, to have intended to make a translation. Barclay's shorter poems, in two books, were printed in the Delitiae Poetarum Scotorum (Amsterdam, 1637, i. pp. 76-136). In the dedication, to Prince Charles of England, he refers to his earlier publication, the Sylvae.

The best account of Barclay is the preface by Jules Dukas in his bibliography of the *Satyricon* (Paris, 1889). This supersedes the life in Bayle's *Dictionary*, which had been the sole authority. A "fifth part" of the *Satyricon* appears in most of the editions, by Alethophilus (Claude Morisot). For the *Argenis*, see the dissertations by Léon Boucher (Paris, 1874), and Dupond (Paris, 1875). The *Icon Animorum* was Englished by Thomas May in 1631 (*The Mirrour of Mindes, or Barclay's Icon Animorum*). Barclay's works have never been collected.

BARCLAY, JOHN (1734-1798), Scottish divine, was born in Perthshire and died at Edinburgh. He graduated at St Andrews, and after being licensed became assistant to the parish minister of Errol in Perthshire. Owing to differences with the minister, he left in 1763 and was appointed assistant to Antony Dow of Fettercairn, Kincardine. In this parish he became very popular, but his opinions failed to give satisfaction to his presbytery. In 1772 he was rejected as successor to Dow, and was even refused by the presbytery the testimonials requisite in order to obtain another living. The refusal of the presbytery was sustained by the General Assembly, and Barclay thereupon left the Scottish church and founded congregations at Sauchyburn, Edinburgh and London. His followers were sometimes called Bereans, because they regulated their conduct by a diligent study of the Scriptures (Acts xvii. 11). They hold a modified form of Calvinism.

His works, which include many hymns and paraphrases of the psalms, and a book called *Without Faith*, *without God*, were edited by J. Thomson and D. Macmillan, with a memoir (1852).

BARCLAY, ROBERT (1648-1690), one of the most eminent writers belonging to the Society of Friends, or Quakers, was born in 1648 at Gordonstown in Morayshire. His father had served under Gustavus Adolphus, and pursued a somewhat tortuous course through the troubles of the civil war. Robert was sent to finish his education in Paris, and it appears he was at one time inclined to accept the Roman Catholic faith. In 1667, however, he followed the example of his father, and joined the recently-formed Society of Friends. In 1670 he married a Quaker lady, Christian Mollison of Aberdeen. He was an ardent theological student, a man of warm feelings and considerable mental powers, and he soon came prominently forward as the leading apologist of the new doctrine, winning his spurs in a controversy with one William Mitchell. The publication of fifteen Theses Theologiae (1676) led to a public discussion in Aberdeen, each side claiming a victory. The most prominent of the Theses was that bearing on immediate revelation, in which the superiority of this inner light to reason or scripture is sharply stated. His greatest work, An Apology for the True Christian Divinity, was published in Latin at Amsterdam in 1676, and was an elaborate statement of the grounds for holding certain fundamental positions laid down in the Theses. It was translated by its author into English in 1678, and is "one of the most impressive theological writings of the century." It breathes a large tolerance and is still perhaps the most important manifesto of the Quaker Society. Barclay experienced to some extent the persecutions inflicted on the new society, and was several times thrown into prison. He travelled extensively in Europe (once with Penn and George Fox), and had several interviews with Elizabeth, princess palatine. In later years he had much influence with James II., who as duke of York had given to twelve members of the society a patent of the province of East New Jersey, Barclay being made governor (1682-88). He is said to have visited James with a view to making terms of accommodation with William of Orange, whose arrival was then imminent. He died on the 3rd of October 1690.

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BARCLAY, WILLIAM (1546-1608) Scottish jurist, was born in Aberdeenshire in 1546. Educated at Aberdeen University, he went to France in 1573, and studied law under Cujas, at Bourges, where he took his doctor's degree. Charles III., duke of Lorraine, appointed him professor of civil law in the newly-founded university of Pont-à-Mousson, and also created him counsellor of state and master of requests. In 1603, however, he was obliged to quit France, having incurred the enmity of the Jesuits, through his opposition to their proposal to admit his son John (q.v.) a member of their society. Returning to England, he was offered considerable preferment by King James on condition of becoming a member of the Church of England. This offer he refused, and returned to France in 1604, when he was appointed professor of civil law in the university of Angers. He died at Angers in 1608. His principal works were De Regno et Regali Potestate, &c. (Paris, 1600), a strenuous defence of the rights of kings, in which he refutes the doctrines of George Buchanan, "Junius Brutus" (Hubert Languet) and Jean Boucher; and De Potestate Papae, &c. (London, 1609), in opposition to the usurpation of temporal powers by the pope, which called forth the celebrated reply of Cardinal Bellarmine; also commentaries on some of the titles of the

BARCLAY DE TOLLY, MICHAEL ANDREAS, called by the Russians Michael, Prince Bogdanovich (1761-1818), Russian field marshal, was born in Livonia in 1761. He was a descendant of a Scottish family which had settled in Russia in the 17th century. He entered the Russian army at an early age. In 1788-1789 he served against the Turks, in 1790 and 1794 against the Swedes and Poles. He became colonel in 1798 and major-general in 1799. In the war of 1806 against Napoleon, Barclay took a distinguished part in the battle of Pultusk and was wounded at Eylau, where his conduct won him promotion to the rank of lieut.-general. In 1808 he commanded against the Swedes in Finland, and in 1809 by a rapid and daring march over the frozen Gulf of Bothnia he surprised and seized Umeo. In 1810 he was made minister of war, and he retained the post until 1813. In 1812 Barclay was given command of one of the armies operating against Napoleon. There was very keen opposition to the appointment of a foreigner as commander-in-chief, and after he was defeated at Smolensk the outcry was so great that he resigned his command and took a subordinate place under the veteran Kutusov. Barclay was present at Borodino, but left the army soon afterwards. In 1813 he was re-employed in the field and took part in the campaign in Germany. After the battle of Bautzen he was reinstated as commander-in-chief of the Russian forces, and in this capacity he served at Dresden, Kulm and Leipzig. After the last battle he was made a count. He took part in the invasion of France in 1814 and at Paris received the baton of a field marshal. In 1815 he was again commander-in-chief of the Russian army which invaded France, and he was made a prince at the close of the war. He died at Insterburg in Prussia on the 14th (16th) of May 1818.

BARCOCHEBAS, Bar-Cochab, or Bar Kokba ("son of a star"), the name given in Christian sources to one Simeon, the leader in the Jewish revolt against Rome in the time of Hadrian (A.D. 132-135). The name does not appear in the Roman historians. In Rabbinic sources he is called Bar (Ben) Coziba, "son of deceit," which perhaps reflects the later verdict of condemnation recorded after his failure (root at "to be false"). Cochab is, therefore, the name either of his father or of his home. But it is recorded that the Rabbi 'Aqība (q.v.), who recognized him as Messiah, applied Num. xxiv. 17 to him, reading not *Cochab* ("a star"), but *Cosiba* ("goes forth from Jacob"); thus Bar-cochab is a Messianic title of the "man of Cozeba" (cf. Chron. iv. 22) whose original name was recalled by later Rabbis with sinister intention. At first the Romans paid little attention to the insurgents, who were able to strike coins in the name of Simeon, prince of Israel, and Eleazar the priest, and to persecute the Christians, who refused to join the revolt. But troops were collected and the various fortresses occupied by the Jews were successively reduced. The end came with the fall of Beth-thar (Bethar). Extraordinary stories were told of the prowess of Barcochebas and

of the ordeals to which he subjected his soldiers in the way of training.

See Eusebius *H.E.* iv. 6; Dio Cassius xix. 12-14; Schürer, *Gesch. d. jüd. Volkes*, 3rd ed. i. 682 ff.; Derenbourg, *Hist. de la Palest.* 423 ff. (distinguishes Barcochebas from Simeon); Schlattler, *Gesch. Israels*, 2nd ed. 303 ff.; articles Jews and Palestine, *History*; also art. s.v. "Bar Kokba" in *Jewish Encyc.* (S. Krauss).

BARD, a word of Celtic derivation (Gaelic baird, Cymric bardh, Irish bard) applied to the ancient Celtic poets, though the name is sometimes loosely used as synonymous with poet in general. So far as can be ascertained, the title bards, and some of the privileges peculiar to that class of poets, are to be found only among Celtic peoples. The name itself is not used by Caesar in his account of the manners and customs of Gaul and Britain, but he appears to ascribe the functions of the bards to a section of the Druids, with which class they seem to have been closely connected. Later Latin authors, such as Lucan (Phar. p. 447), Festus (De Verb. Sign. s.v.), and Ammianus Marcellinus (bk. xv.), used the term Bardi as the recognized title of the national poets or minstrels among the peoples of Gaul and Britain. In Gaul, however, the institution soon disappeared; the purely Celtic peoples were swept back by the waves of Latin and Teutonic conquest, and finally settled in Wales, Ireland, Brittany and the north of Scotland. There is clear evidence of the existence of bards in all these places, though the known relics belong almost entirely to Wales and Ireland, where the institution was more distinctively national. In Wales they formed an organized society, with hereditary rights and privileges. They were treated with the utmost respect and were exempt from taxes or military service. Their special duties were to celebrate the victories of their people and to sing hymns of praise to God. They thus gave poetic expression to the religious and national sentiments of the people, and therefore exercised a very powerful influence. The whole society of bards was regulated by laws, said to have been first distinctly formulated by Hywell Dha, and to have been afterwards revised by Gruffydd ap Conan. At stated intervals great festivals were held, at which the most famous bards from the various districts met and contended in song, the umpires being generally the princes and nobles. Even after the conquest of Wales, these congresses, or Eisteddfodau, as they were called (from the Welsh eistedd, to sit), continued to be summoned by royal commission, but from the reign of Elizabeth the custom has been allowed to fall into abeyance. They have not been since summoned by royal authority, but were revived about 1822, and are held regularly at the present time. In modern Welsh, a bard is a poet whose vocation has been recognized at an Eisteddfod. In Ireland also the bards were a distinct class with peculiar and hereditary privileges. They appear to have been divided into three great sections: the first celebrated victories and sang hymns of praise; the second chanted the laws of the nation; the third gave poetic genealogies and family histories. The Irish bards were held in high repute, and frequently were brought over to Wales to give instruction to the singers of that country.

In consequence, perhaps, of Lucan's having spoken of *carmina bardi*, the word bard began to be used, early in the 17th century, to designate any kind of a serious poet, whether lyric or epic, and is so employed by Shakespeare, Milton and Pope. On the other hand, in Lowland Scots it grew to be a term of contempt and reproach, as describing a class of frenzied vagabonds.

See Ed. Jones, *Relics of the Welsh Bards* (1784); Walker, *Memoirs of the Irish Bards* (1786); Owen Jones, *Myvyrian Archaeology of Wales* (3 vols., 1801-1807); W. F. Skene, *Four Ancient Books of Wales* (2 vols., 1868).

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BARDAISAN, an early teacher of Christianity in Mesopotamia, the writer of numerous Syriac works which have entirely perished [1] (with one possible exception, the Hymn of the Soul in the Acts of Thomas), and the founder of a school which was soon branded as heretical. According to the trustworthy Chronicle of Edessa, he was born in that city on the 11th Tammuz (July), A.D. 154. His parents were of rank and probably pagan; according to Barhebraeus, he was in youth a priest in a heathen temple at Mabbog. Another probable tradition asserts that he shared the education of a royal prince who afterwards became king of Edessa—perhaps Abgar bar Manu, who reigned 202-217. He is said to have converted the prince to Christianity, and may have had an important share in christianizing the city. Epiphanius and Barhebraeus assert that he was first an orthodox Christian and afterwards an adherent of Valentinus; but Eusebius and the Armenian Moses of Chorene reverse the order, stating that in his later days he largely, but not completely, purged himself of his earlier errors. The earliest works attributed to him (by Eusebius and others) are polemical dialogues against Marcionism and other heresies; these were afterwards translated into Greek. He also wrote, probably under Caracalla, an apology for the Christian religion in a time of persecution. But his greatest title to fame was furnished by his hymns, which, according to St Ephrem, numbered 150 and were composed in imitation of the Davidic psalter. He thus became the father of Syriac hymnology, and from the favour enjoyed by his poems during the century and a half that intervened between him and St Ephrem we may conclude that he possessed original poetic genius. This would be clearly proved if (as is not unlikely) the beautiful Hymn of the Soul incorporated in the apocryphal Acts of Thomas could be regarded as proceeding from his pen; it is practically the only piece of real poetry in Syriac that has come down to us. Perhaps owing to the persecution under Caracalla mentioned above, Bardaiṣān for a time retreated into Armenia, and is said to have there preached Christianity with indifferent success, and also to have composed a history of the Armenian kings. Porphyry states that on one occasion at Edessa he interviewed an Indian deputation who had been sent to the Roman emperor, and questioned them as to the nature of Indian religion. He was undoubtedly a man of wide culture. He died (according to the patriarch Michael) in 222.

For our knowledge of Bardaiṣān's doctrine we are mainly dependent on the hostile witness of St Ephrem, and on statements by Greek writers who had no acquaintance with his works in their original form. His teaching had certain affinities with gnosticism. Thus he certainly denied the resurrection of the body; and so far as we can judge by the obscure quotations from his hymns furnished by St Ephrem he explained the origin of the world by a process of emanation from the supreme God whom he called "the Father of the living." On the other hand the dialogue known as the Book of the Laws of the Countries, which was written by a disciple and is quoted by Eusebius as a genuine exposition of the master's teaching—while it recognizes the influence of the celestial bodies over the body of man and throughout the material sphere and attributes to them a certain delegated authority^[2]—upholds the freedom of the human will and can in the main be reconciled with orthodox Christian teaching. On this M. Nau has based his effort (see Une Biographie inédite de Bardesane l'astroloque, Paris, 1897; Le Livre des lois des pays, Paris, 1899) to clear Bardaisan of the reproach of gnosticism, maintaining that the charge of heresy arises from a misunderstanding of certain astrological speculations. It must be admitted that it is impossible to reconstruct Bardaisān's system from the few fragments remaining of his own work and therefore a certain verdict cannot be given. But the ancient testimony to the connexion of Bardaiṣān with Valentinianism is strong, and the dialogue probably represents a modification of Bardesanist teaching in the direction of orthodoxy. The later adherents of the school appear to have moved towards a Manichean dualism.

The subject is exhaustively discussed in Hort's article "Bardaisan" in *Dict. Christ. Biog.*, and a full collection of the ancient testimonies will be found in Harnack's *Altchristliche Litteratur*, vol. i. pp. 184 ff.

(N. M.)

- [1] The *Book of the Laws of the Countries*, referred to below, is the work of a disciple of Bardaiṣān.
- [2] Even Ephrem allows that Bardaiṣān was in principle a monotheist.

BARDILI, CHRISTOPH GOTTFRIED (1761-1808), German philosopher, was born at Blaubeuren in Württemberg, and died at Stuttgart. His system has had little influence in Germany; Reinhold (q.v.) alone expounded it against the attacks of Fichte and Schelling. Yet in some respects his ideas opened the way for the later speculations of Schelling and Hegel. He dissented strongly from the Kantian distinction between matter and form of thought, and urged that philosophy should consider only thought in itself, pure thought, the ground or possibility of being. The fundamental principle of thought is, according to him, the law of identity; logical thinking is real thinking. The matter upon which thought operated is in itself indefinite and is rendered definite through the action of thought. Bardili worked out his idea in a one-sided manner. He held that thought has in itself no power of development, and ultimately reduced it to arithmetical computation. He published Grundriss der ersten Logik (Stuttgart, 1800); Über die Gesetze der Ideenassociation (Tübingen, 1796); Briefe über den Ursprung der Metaphysik (Altona, 1798); Philos. Elementarlehre (Landshut, 1802-1806); Beiträge zur Beurteilung des gegenwärtigen Zustandes der Vernunftlehre (Landshut, 1803).

See C. L. Michelet, Geschichte der letzten Systeme; J. E. Erdmann, Versuch einer Geschichte d. neu. Phil. Bd. iii. pt. i.; B's und Reinholds Briefwechsel.

BARDOUX, AGÉNOR (1820-1897), French statesman, was a native of Bourges. Established as an advocate at Clermont, he did not hesitate to proclaim his republican sympathies. In 1871 he was elected deputy of the National Assembly, and re-elected in 1876 and in 1877. In the chamber he was president of the group of the left centre, standing strongly for the republic but against anti-clericalism. After the *coup d'état* of the 16th of May, he was one of the leaders of the "363." In the republican chamber elected after the 16th of May, he became minister of public instruction (December 1877), and proposed various republican laws, notably on compulsory primary education. He resigned in 1879. He was not re-elected in 1881, but in December 1882 was named senator for life. He wrote essays on *Les Légistes et leur influence sur la société française* (1878); *Le Comte de Montlosier et le Gallicanisme* (1881); and published in 1882 his *Dix Années de vie politique*.

BARDOWIEK, a village of Germany, in the Prussian province of Hanover, 3 m. N. of Lüneburg on the navigable Ilmenau. Pop. 2000. Its trade consists entirely in agricultural produce. The Gothic parish church (c. 1400) incorporates remains of a cathedral of vast dimensions.

Bardowiek was founded in the 8th century by Charlemagne, who established a bishopric in it, and until its destruction by Henry the Lion in 1189, it was the most prosperous commercial city of north Germany. Its name is derived from the Longobardi, the tribe for whom it was the home and centre, and from it the colonization of Lombardy started.

BARDSEY (*i.e.* "Bards' Island": cf. Anglesey, "Angles' Island"; Welsh, *Ynys Enlli*, "isle of the current"), an island at the northern extremity of Cardigan Bay. The "sound" between Aberdaron point and the island is some 4 m. wide. Bardsey is included in Carnarvonshire, North Wales (but traditionally in S. Wales). On the N.W. side it has high cliffs. It is about $2\frac{1}{2}$ m. long by $\frac{3}{4}$ m. broad, with an area of some 370 acres, a third of which is hilly. Barley and oats are grown. On the S.E. side is a fairly deep harbour. On the N.E. are the ruins of the tower of St Mary's abbey (13th century). There is no Anglican church, the inhabitants being Dissenters. They are farmers and fishermen. The lighthouse, with fixed light, 140 ft. high and visible for 17 m., is locally

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celebrated. The rectory of Aberdaron (on the mainland, opposite Bardsey), Penmachno and Llangwnadl (Llangwynhoedl), in Lleyn (S. Carnarvonshire), belong to St John's College, Cambridge. St Dubricius made the sanctuary famous, and died here in 612. Here was the burialplace of all the monks whose friends could afford to go thither with their bodies. All the great abbeys of England sent their quota. Roads to Bardsey—with the monks' wells, found at intervals of 7 to 9 m.—run from north, east and south. The remnant of priests fled thither (after the great massacre of Bangor-is-coed in 613, by Ethelfride of Northumbria) by the road of the Rivals (Yn Eifl) hill, S. Carnarvonshire, on which Pistyll farm still gives food gratis to all pilgrims or travellers. A part of the isle is one great cemetery of about 3 to 4 acres, with rude, rough graves as close to each other as possible, with slabs upon them. Though Aberdaron rectory does not belong to the isle, the farm "Cwrt" (Court), where the abbot held his court, still goes with Bardsey, which was granted to John Wynn of Bodvel, Carnarvonshire, after the battle and partial sack of Norwich by the Puritans in the Civil War; passing through Mary Bodvel to her husband, the earl of Radnor, who sold it to Dr Wilson of York. The doctor, in turn, sold it to Sir John Wynn, of Glynllifon and Bodfean Hall, Carnarvonshire. One of the Wynns, the 3rd Baron Newborough, was, at his wish, buried here. The archaeology and history of the isle are voluminous. Lady Guest's Mabinogion translation (i. p. 115, ed. of 1838) gives an account of the (legendary) Bardsey House of Glass, into which Merlin (Myrddin) took a magic ring, originally kept at Caerleon-on-Usk.

BARÈGES, a town of south-western France, in the department of Hautes-Pyrénées, in the valley of the Bastan, 25 m. S.S.W. of Bagnères-de-Bigorre by road. The town, which is situated at an altitude of 4040 ft., is hardly inhabited in the winter. It is celebrated for its warm sulphurous springs (75° to 111° F.), which first became generally known in 1675 when they were visited by Madame de Maintenon and the duke of Maine, son of Louis XIV. The waters, which are used for drinking and in baths, are efficacious in the treatment of wounds and ulcers and in cases of scrofula, gout, skin diseases, &c. There is a military hospital, founded in 1760. The town was formerly much exposed to avalanches and floods, which are now less frequent owing to the construction of embankments and replanting of the hillsides. It is a centre for mountain excursions. The light silk and wool fabric called *barège* takes its name from the place, where it was first made.

BAREILLY, or Barell, a city and district of British India in the Bareilly or Rohilkhand division of the United Provinces. The city is situated on the Ramganga river, 812 m. N.W. from Calcutta by rail. Pop. (1901) 131,208. The principal buildings are two mosques built in the 17th century; a modern fort overlooking the cantonments; the railway station, which is an important junction on the Oudh and Rohilkhand line; the palace of the nawab of Rampur, and the government college. Bareilly is the headquarters of a brigade in the 7th division of the eastern army corps. The chief manufactures are furniture and upholstery. Bareilly college is a seat of upper class learning for the surrounding districts. It is conducted by an English staff, and its course includes the subjects for degrees in the Calcutta University.

The district of Bareilly has an area of 1580 sq. m. It is a level country, watered by many streams, the general slope being towards the south. The soil is fertile and highly cultivated, groves of noble trees abound, and the villages have a neat, prosperous look. A tract of forest jungle, called the tarai, stretches along the extreme north of the district, and teems with large game, such as tigers, bears, deer, wild pigs, &c. The river Sarda or Gogra forms the eastern boundary of the district and is the principal stream. Next in importance is the Ramganga, which receives as its tributaries most of the hill torrents of the Kumaon mountains. The Deoha is another great drainage artery and receives many minor streams. The Gomati or Gumti also passes through the district. The population in 1901 was 1,090,117. The Mahommedans are chiefly the descendants of Yusafzai Afghans, called the Rohilla Pathans, who settled in the country about the year 1720. The Rohillas were formerly the ruling race of the tract of country called Rohilkhand, and are men of a taller stature, a fairer complexion and a more arrogant air than the general inhabitants of the district. Bishop Heber described them as follows:—"The country is burdened with a crowd of lazy, profligate, self-called sawars (cavaliers), who, though many of them are not worth a rupee, conceive it derogatory to their gentility and Pathan blood to apply themselves to any honest industry, and obtain for the most part a precarious livelihood by sponging on the industrious tradesmen and farmers, on whom they levy a sort of blackmail, or as hangers-on to the wealthy and noble families yet remaining in the province. These men have no visible means of maintenance, and no visible occupation except that of lounging up and down with their swords and shields, like the ancient Highlanders, whom in many respects they much resemble." The Rohillas, after fifty years' precarious independence, were subjugated in 1774 by the confederacy of British troops with the nawab of Oudh's army, which formed so serious a charge against Warren Hastings. Their territory was in that year annexed to Oudh. In 1801 the nawab of Oudh ceded it to the Company in commutation of the subsidy money. During the Mutiny of 1857 the Rohillas took a very active part against the English, but since then they have been disarmed. Both before and after that year, however, the Bareilly Mahommedans have distinguished themselves by fanatical tumults against the Hindus. The district is irrigated from the Rohilkhand system of government canals. There are no manufactures except for domestic use and little external trade. Several lines of the Oudh and Rohilkhand railway pass through the district.

BARENTIN, a town of northern France, in the department of Seine-Inférieure, 11 m. N.N.W. of Rouen by rail. Pop. (1906) 5245. The town is situated in the valley of the Austreberthe, a small affluent of the Seine, here crossed at a height of 100 ft. by a fine railway viaduct 540 yds. long. The manufacture of cotton fabrics is the principal industry.

BARENTS, WILLEM (d. 1597), Dutch navigator, was born about the middle of the 16th century. In 1594 he left Amsterdam with two ships to search for a north-east passage to eastern Asia. He reached the west coast of Novaya Zemlya, and followed it northward, being finally forced to turn back when near its northern extremity. In the following year he commanded another expedition of seven ships, which made for the strait between the Asiatic coast and Vaygach Island, but was too late to find open water; while his third journey equally failed of its object and resulted in his death. On this occasion he had two ships, and on the outward journey sighted Bear Island and Spitsbergen, where the ships separated. Barents' vessel, after rounding the north of Novaya Zemlya, was beset by ice and he was compelled to winter in the north; and as his ship was not released early in 1597, his party left her in two open boats on the 13th of June and most of its members escaped. Barents himself, however, died on the 30th of June 1597. In 1871 the house in which he wintered was discovered, with many relics, which are preserved at the Hague, and in 1875 part of his journal was found.

See *The Three Voyages of Barents*, by Gerrit de Veer, translated by the Hakluyt Society (1876) from de Veer's text (Amsterdam, 1598).

BARENTS SEA, that part of the Arctic Ocean which is demarcated by the north coast of Europe, the islands of Novaya Zemlya, Franz Josef Land and Spitsbergen, and smaller intervening islands; it was named after the Dutch navigator. Omitting the great inlet of the White Sea in the south, it extends from about 67° to 80° N., and from 20° to 60° E. The southern part, off the Murman coast of the Kola peninsula, is sometimes called the Murman Sea.

BARÈRE DE VIEUZAC, BERTRAND (1755-1841), one of the most notorious members of the French National Convention, was born at Tarbes in Gascony on the 10th of September 1755. The name of Barère de Vieuzac, by which he continued to call himself long after the renunciation of feudal rights on the famous 4th of August, was assumed from a small fief belonging to his father, a lawyer at Vieuzac. He began to practise as an advocate at the parlement of Toulouse in 1770, and soon earned a considerable reputation as an orator; while his brilliant and flowing style as a writer of essays led to his election as a member of the Academy of Floral Games of Toulouse in 1788. At the age of thirty he married. Four years later, in 1789, he was elected deputy by the estates of Bigorre to the states-general, which met in May. He had made his first visit to Paris in the preceding year. His personal appearance, his manners, social qualities and liberal opinions, gave him a good standing among the multitude of provincial deputies then thronging into Paris. He attached himself at first to the constitutional party; but he was less known as a speaker in the Assembly than as a journalist. His paper, however, the Point du Jour, according to Aulard, owes its reputation not so much to its own qualities as to the fact that the painter David, in his famous picture of the "Oath in the Tennis Court," has represented Barère kneeling in the corner and writing a report of the proceedings as though for posterity. The reports of the debates of the National Assembly in the Point du Jour, though not inaccurate, are as a matter of fact very incomplete and very dry. After the flight of the king to Varennes, Barère passed over to the republican party, though he continued to keep in touch with the duke of Orleans, to whose natural daughter, Paméla, he was tutor. Barère, however, appears to have been wholly free from any guiding principle; conscience he had none, and his conduct was regulated only by the determination to be on the side of the strongest. After the close of the National Assembly he was nominated one of the judges of the newly instituted court of cassation from October 1791 to September 1792. In 1792 he was elected deputy to the National Convention for the department of the Hautes-Pyrénées. At first he voted with the Girondists, attacked Robespierre, "a pygmy who should not be set on a pedestal," and at the trial of the king voted with the Mountain for the king's death "without appeal and without delay." He closed his speech with a sentence which became memorable: "the tree of liberty could not grow were it not watered with the blood of kings." Appointed member of the Committee of Public Safety on the 7th of April 1793, he busied himself with foreign affairs; then, joining the party of Robespierre, whose resentment he had averted by timely flatteries, he played an important part in the second Committee of Public Safety—after the 17th of July 1793—and voted for the death of the Girondists. He was thoroughly unscrupulous, stopping at nothing to maintain the supremacy of the Mountain, and rendered it great service by his rapid work, by the telling phases of his oratory, and by his clear expositions of the problems of the day. On the 9th Thermidor (July 27th, 1794) Barère hesitated, then he drew up the report outlawing Robespierre. In spite of this, in Germinal of the year III. (the 21st of March to the 4th of April 1795), the Thermidorians decreed the accusation of Barère and his colleagues of the Terror, Collot d'Herbois and Billaud-Varenne, and he was sent to the Isle of Oléron. He was removed to Saintes, and thence escaped to Bordeaux, where he lived in concealment for several years. In 1795 he was elected member of the Council of Five Hundred, but was not allowed to take his seat. Later he was used as a secret agent by Napoleon I., for whom he carried on a diplomatic correspondence. On the fall of Napoleon, Barère played the part of royalist, but on the final restoration of the Bourbons in 1815 he was banished for life from France as a regicide, and then withdrew to Brussels and temporary oblivion. After the revolution of July 1830 he reappeared in France, was reduced by a series of lawsuits to extreme indigence,

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The Mémoires de B. Barère ... publiés par MM. H. Carnot ... et David (d'Angers) ... précédés d'une notice historique (Paris, 1824-1844) are false, but contain valuable information; Carnot's Notice, which is very good, was published separately in 1842. See F. A. Aulard, Les Orateurs de la Constituante (Paris, 1882); Les Orateurs de la Convention (2nd ed., Paris, 1905). Macaulay's

accepted a small pension assigned him by Louis Philippe (on whom he had heaped abuse and railing), and died, the last survivor of the Committee of Public Safety, on the 13th of January

1841. (See also French Revolution.)

essay on Barère, (Edinburgh Review, vol. 79) is eloquent, but incorrect.

BARETTI, GIUSEPPE MARC' ANTONIO (1719-1789), Italian critic, was born at Turin in 1719. He was intended by his father for the profession of law, but at the age of sixteen fled from Turin and went to Guastalla, where he was for some time employed in a mercantile house. His leisure hours he devoted to literature and criticism, in which he became expert. For many years he led a wandering life, supporting himself chiefly by his writings. At length he arrived in London, where he remained for a considerable time. He obtained an appointment as secretary to the Royal Academy of Painting, and became acquainted with Johnson, Garrick and others of that society. He was a frequent visitor at the Thrales'; and his name occurs repeatedly in Boswell's Life. In 1769 he was tried for murder, having had the misfortune to inflict a mortal wound with his fruit knife on a man who had assaulted him on the street. Johnson among others gave evidence in his favour at the trial, which resulted in Baretti's acquittal. He died in May 1789. His first work of any importance was the *Italian Library* (London, 1757), a useful catalogue of the lives and works of many Italian authors. The Lettere famigliari, giving an account of his travels through Spain, Portugal and France during the years 1761-1765, were well received, and when afterwards published in English (4 vols., 1770), were highly commended by Johnson. While in Italy on his travels Baretti set on foot a journal of literary criticism, to which he gave the title of Frusta letteraria, the literary scourge. It was published under considerable difficulties and was soon discontinued. The criticisms on contemporary writers were sometimes just, but are frequently disfigured by undue vehemence and coarseness. Among his other numerous works may be mentioned a useful Dictionary and Grammar of the Italian Language, and a dissertation on Shakespeare and Voltaire. His collected works were published at Milan in 1838.

BARFLEUR, a small seaport of north-western France, overlooking the Bay of the Seine, in the department of Manche, 22½ m. N.N.E. of Valognes by rail. Pop. (1906) 1069. In the middle ages Barfleur was one of the chief ports of embarkation for England. In 1120 the "White Ship," carrying Prince William, only son of Henry I., went down outside the harbour. About 2 m. to the north is Cape Barfleur, with a lighthouse 233 ft. high.

BARFURUSH, a town of Persia, in the province of Mazandaran in 36° 32′ N., and 52° 42′ E., and on the left bank of the river Bawul [Babul], which is here crossed by a bridge of eight arches, about 15 m. distant from the southern shore of the Caspian Sea, where the small town of Meshed i Sar serves as a port. It is the commercial capital of Mazandaran, and 26 m. distant from Sari and 90 m. from Teheran. Pop. about 50,000. Built in a low and swampy country and approached by deep and almost impassable roads, Barfurush would not seem at all favourably situated for the seat of an extensive inland trade; it is, however, peopled entirely by merchants and tradesmen, and is wholly indebted for its present size and importance to its commercial prosperity. The principal articles of its trade are rice and cotton, some sugar cane (nai shakar), flax (Katūn) and hemp (Kanab) are also grown. The town is of peculiar structure and aspect, being placed in the midst of a forest of tall trees, by which the buildings are so separated from one another, and so concealed, that, except in the bazars, it has no appearance of a populous town. The streets are broad and neat, though generally unpaved, and kept in good order. No ruins are to be seen as in other Persian towns; the houses are comfortable, in good repair, roofed with tiles and enclosed by substantial walls. There are no public buildings of any importance, and the only places of interest are the bazars, which extend fully a mile in length, and consist of substantially built ranges of shops covered with roofs of wood and tiles, and well stored with commodities. There are about ten commodious caravanserais and a number of colleges (medresseh), the place being as much celebrated for learning as for commerce. On an island in a small lake east of the town is a garden, called Bagh i Shah (garden of the Shah), with ruined palaces and baths. At Meshed i Sar, the port, or roadstead of Barfurush, the steamers of the Caucasus and Mercury Company call weekly, and a brisk shipping trade is carried on between it and other Caspian ports.

Barfurush was formerly called Māmatīr. The present name is from a settlement called Barfurushdeh, which was added to the old city A.D. 1012.

(A. H.-S.)

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BARGAIN^[1] AND SALE, in English law, a contract whereby property, real or personal, is transferred from one person-called the bargainer-to another-called the bargainee-for a valuable consideration; but the term is more particularly used to describe a mode of conveyance of lands. The disabilities under which a feudal owner very frequently lay gave rise to the practice of conveying land by other methods than that of feoffment with livery of seisin, that is, a handing over of the feudal possession. That of "bargain and sale" was one. Where a man bargained and sold his land to another for pecuniary consideration, which might be merely nominal, and need not necessarily be actually paid, equity held the bargainer to be seised of the land to the use of the bargainee. The Statute of Uses (1535), by converting the bargainee's interest into a legal estate, had an effect contrary to the intention of its framers. It made bargain and sale an easy means of secret or private conveyance, a policy to which the law was opposed. To remedy this defect, a statute (called the Statute of Enrolments) was passed in the same year, which provided that every conveyance by bargain and sale of freehold lands should be enrolled in a court of record or with the custos rotulorum of the county within six months of its date. The Statute of Enrolments applied only to estates of inheritance or for life, so that a bargain and sale of an estate for years might be made without enrolment. This in turn was the foundation of another mode of conveyance, namely, lease and release, which took the place of the deed of bargain and sale, so far as regards freehold. Bargain and sale of copyhold estates, which operates at common

law, is still a mode of conveyance in England in the case of a sale by executors, where a testator has directed a sale of his estate to be made, instead of devising it to trustees upon trust to sell.

See also Conveyancing

[1] From O. Fr. *bargaigne*, a word of doubtful origin, appearing in many Romance languages, cf. Ital. *bargagno*; it is connected with Late Lat. *barcaniare*, to traffic, possibly derived from *barca*, a barge.

BARGE (Med. Lat. *barca*, possibly connected with Lat. *baris*, Gr. βᾶρις, a boat used on the Nile), formerly a small sailing vessel, but now generally a flat-bottomed boat used for carrying goods on inland navigations. On canals barges are usually towed, but are sometimes fitted with some kind of engine; the men in charge of them are known as bargees. On tidal rivers barges are often provided with masts and sails ("sailing barges"), or in default of being towed, they drift with the current, guided by a long oar or oars ("dumb-barges"). Barges used for unloading, or loading, the cargo of ships in harbours are sometimes called "lighters" (from the verb "to light" = to relieve of a load). A state barge was a heavy, often highly ornamented vessel used for carrying passengers on occasions of state ceremonials. The college barges at Oxford are houseboats moored in the river for the use of members of the college rowing clubs. In New England the word barge frequently means a vehicle, usually covered, with seats down the side, used for picnic parties or the conveyance of passengers to or from piers or railway stations.

BARGEBOARD (probably from Med. Lat. *bargus*, or *barcus*, a scaffold, and not from the now obsolete synonym "vergeboard"), the boards fastened to the projecting gables of a roof to give strength to the same and to mask or hide the horizontal timbers of the roof to which they were attached. Bargeboards are sometimes moulded only or carved, but as a rule the lower edges were cusped and had tracery in the spandrels besides being otherwise elaborated. The richest example is one at Ockwells in Berkshire, England, which is moulded and carved as if it were intended for internal work.

BARGHEST, Barguest or Bargest, the name given in the north of England, especially in Yorkshire, to a monstrous goblin-dog with huge teeth and claws. The spectre-hound under various names is familiar in folk-lore. The Demon of Tedworth, the Black Dog of Winchester and the Padfoot of Wakefield all shared the characteristics of the Barghest of York. In Wales its counterpart was Gwyllgi, "the Dog of Darkness," a frightful apparition of a mastiff with baleful breath and blazing red eyes. In Lancashire the spectre-hound is called Trash or Striker. In Cambridgeshire and on the Norfolk coast it is known as Shuck or Shock. In the Isle of Man it is styled Mauthe Doog. It is mentioned by Sir Walter Scott in "The Lay of the Last Minstrel"—

"For he was speechless, ghastly, wan Like him of whom the story ran Who spoke the spectre hound in Man."

A Welsh variant is the *Cwn Annwn*, or "dogs of hell." The barghest was essentially a nocturnal spectre, and its appearance was regarded as a portent of death. Its Welsh form is confined to the sea-coast parishes, and on the Norfolk coast the creature is supposed to be amphibious, coming out of the sea by night and travelling about the lonely lanes. The derivation of the word barghest is disputed. "Ghost" in the north of England is pronounced "guest," and the name is thought to be *burh-ghest*, "town-ghost." Others explain it as German *Berg-geist*, "mountain demon," or *Bargeist*, "bear-demon," in allusion to its alleged appearance at times as a bear. The barghest has a kinsman in the *Rongeur d'Os* of Norman folklore. A belief in the spectre-hound still lingers in the wild parts of the north country of England, and in Nidderdale, Yorkshire, nurses frighten children with its name.

See Wirt Sikes, *British Goblins* (1880); *Notes and Queries*, first series, ii. 51; Joseph Ritson, *Fairy Tales* (Lond. 1831), p. 58; *Lancashire Folklore* (1867); Joseph Lucas, *Studies in Nidderdale* (Pateley Bridge, 1882).

BARHAM, RICHARD HARRIS (1788-1845), English humourist, better known by his nom de plume of Thomas Ingoldsby, was born at Canterbury on the 6th of December 1788. At seven years of age he lost his father, who left him a small estate, part of which was the manor of Tappington, so frequently mentioned in the Legends. At nine he was sent to St Paul's school, but his studies were interrupted by an accident which shattered his arm and partially crippled it for life. Thus deprived of the power of bodily activity, he became a great reader and diligent student. In 1807 he entered Brasenose College, Oxford, intending at first to study for the profession of the law. Circumstances, however, induced him to change his mind and to enter the church. In 1813 he was ordained and took a country curacy; he married in the following year, and in 1821 removed to London on obtaining the appointment of minor canon of St Paul's cathedral. Three years later he became one of the priests in ordinary of the King's Chapel Royal, and was appointed to a city living. In 1826 he first contributed to Blackwood's Magazine; and on the establishment of Bentley's Miscellany in 1837 he began to furnish the series of grotesque metrical tales known as The Ingoldsby Legends. These became very popular, were published in a collected form and have since passed through numerous editions. In variety and whimsicality of rhymes these verses have hardly a rival since the days of Hudibras. But beneath this obvious popular quality there lies a store of solid antiquarian learning, the fruit of patient enthusiastic research, in out-of-the-way old books, which few readers who laugh over his pages detect. His life was grave, dignified and highly honoured. His sound judgment and his kind heart made him the trusted counsellor, the

valued friend and the frequent peacemaker; and he was intolerant of all that was mean and base and false. In politics he was a Tory of the old school; yet he was the lifelong friend of the liberal Sydney Smith, whom in many respects he singularly resembled. Theodore Hook was one of his most intimate friends. Barham was a contributor to the *Edinburgh Review* and the *Literary Gazette*; he wrote articles for Gorton's *Biographical Dictionary*; and a novel, *My Cousin Nicholas* (1834). He retained vigour and freshness of heart and mind to the last, and his last verses ("As I laye a-thynkynge") show no signs of decay. He died in London after a long, painful illness, on the 17th of June 1845.

A short memoir, by his son, was prefixed to a new edition of *Ingoldsby* in 1847, and a fuller *Life* and *Letters*, from the same hand, was published in 2 vols. in 1870.

BAR HARBOR, a well-known summer resort of Hancock county, Maine, U.S.A., an unincorporated village, in the township of Eden, on Frenchman's Bay, on the E. side of Mount Desert Island, about 45 m. S.E. of Bangor. Pop. of the township (1900) 4379; (1910) 4441; of the village (1910), about 2000, greatly increased during the summer season. Bar Harbor is served by the Maine Central railway and by steamship lines to New York, Boston, Portland and other ports. The summer climate is cool, usually too cool for sea-bathing, but there is a large open-air salt water swimming bath. Rugged mountains from 1000 to 1500 ft. in height, a coast with deep indentations and lined with bold cliffs, a sea dotted with rocky islets, clear lakes, sparkling rivulets, deep gorges, and wooded glens are features of the attractive scenery here and in the vicinity. Several fine hotels and a number of costly residences occupy a plateau along the shore and the hillsides farther back. The Kebo Valley Club has fine golf links here; and since 1900 an annual horse show and fair has been held at Robin Hood Park at the foot of Newport Mountain. Bar Harbor is usually a summer rendezvous of the North Atlantic Squadron of the United States Navy. The name Bar Harbor, which displaced East Eden, was suggested by the bar which appears at low water between it and Bar Island. Although the first summer hotel was built here in 1855. Bar Harbor's development as a summer resort began about 1870, after some artists had visited the place, and made it widely known through their pictures. (See MOUNT DESERT.)

BAR-HEBRAEUS or Abu'l-Faraj, a maphrian or catholicus of the Jacobite (Monophysite) Church in the 13th century, and (in Dr. Wright's words) "one of the most learned and versatile men that Syria ever produced." Perhaps no more industrious compiler of knowledge ever lived. Simple and uncritical in his modes of thought, and apparently devoid of any striking originality, he collected in his numerous and elaborate treatises the results of such research in theology, philosophy, science and history as was in his time possible in Syria. Most of his works were written in Syriac, but some few in Arabic, which had long before his time supplanted Syriac as a living speech.

The son of a physician of Jewish descent, Bar-Hebraeus was born in 1226 at Malațiah on the upper Euphrates. His youth was passed in the troublous times of the Mongol advance into western Asia, and his father eventually retired to Antioch, where Bar-Hebraeus completed his education. In 1246 he was ordained at Tripolis as Jacobite bishop of Gūbās near Malația, and a year later was transferred to the neighbouring diocese of Laķabhīn, whence in 1253 he passed to be bishop of Aleppo. Deposed almost immediately by an ecclesiastical superior on account of disputes about the patriarchate, he was restored to his see in 1258, and in 1264 was promoted by the patriarch Ignatius III. to be maphriān—the next rank below that of patriarch—an office which he held till his death at Marāgha in 1286. He seems to have been a model of devotion to his ecclesiastical duties and to have won the respect of all parties in his diocese.

It is mainly as an historian that Bar-Hebraeus interests the modern student. His great historical work—the Syriac *Chronicle*—is made up of three parts. The first^[1] is a history of secular events from the Creation to his own time, and in its later portions gives valuable information regarding the history of south-east Europe and western Asia. A compendium in Arabic of this secular history was made by Bar-Hebraeus under the title *al-Mukhtaṣar fi'd-Duwal* (Compendious History of the Dynasties). The second and third parts^[2] of the *Chronicle* deal with the history of the Church, the second being mainly concerned with the patriarchate of Antioch, and the third with the eastern branch of the Syrian Church. Of special value to theologians is the *Auṣar Rāzē* (Storehouse of Secrets), a critical and doctrinal commentary on the text of the Scriptures. Of this many portions have been edited by various scholars, and a valuable study of the work, together with a biography and estimate of its author, has been published by J. Göttsberger (*Barhebräus und seine Scholien zur heiligen Schrift*, Freiburg i. B., 1900).

A full list of Bar-Hebraeus's other works, and of editions of such of them as have been published, will be found in W. Wright's *Syriac Literature*, pp. 268-281. The more important of them are:—(1) *Kěthābhā dhe-Bhābhāthā* (Book of the Pupils of the Eyes), a treatise on logic or dialectics; (2) *Hēwath Hēkhměthā* (Butter of Wisdom), an exposition of the whole philosophy of Aristotle; (3) *Sullāķā Haunānāyā* (Ascent of the Mind), a treatise on astronomy and cosmography, edited and translated by F. Nau (Paris, 1899); (4) various medical works; (5) *Kěthābhā dhě-Ṣemḥē* (Book of Ravs), a treatise on grammar; (6) ethical works; (7) poems; (8) *Kěthābhā dhě-Thunnāyē Měghaḥḥěkhānē* (Book of Entertaining Stories), edited and translated by E. A. W. Budge (London, 1897).

(N. M.)

[1] Imperfectly edited and translated by Bruns and Kirsch in 1789. There is now a better edition by Bedjan (Paris, 1890).

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[2] Edited and translated by Abbeloos and Lamy (Paris and Louvain, 1872-1873).

BARI, a tribe of Nilotic negroes, living on the banks of the upper Nile some 200 m. N. of Albert Nyanza. They have as neighbours the Dinka to the north, the Madi to the south, and the Galla to the east. The men are tall and thin, the women fat and under middle height. Their colour is a deep dead brown. The men and unmarried girls go practically naked, the married women wearing a goatskin dyed red. The body is ornamented with red clay and the lower incisors are often extracted. Their sole wealth is cattle and their chief food milk and blood; meat is only eaten when a cow happens to die. They live in round grass huts with conical roofs. Twins are considered unlucky, the mother is divorced by her husband and her family must refund part of the marriage-price. The dead are buried in the hut; a square grave is dug in which the body is arranged in a sitting position with the hands tied behind the back. The most important men in the country are the rainmakers, who are reverenced even more than the chiefs, and, indeed, are famous among the surrounding tribes. The Bari warriors have been much recruited for the Egyptian army and were formerly used as slave-hunters by the Arab traders.

See Sir Samuel Baker, *The Albert N'yanza* (London, 1866); Friedrich Muller, *Die Sprache der Bari* (Vienna, 1864); G. Casati, *Ten Years in Equatoria* (London, 1891); W. Junker, *Travels in Africa* (English ed., 1890-1892); R. C. Owen, *Bari Grammar* (1908).

BARI (anc. Barium), a seaport and archiepiscopal see of Apulia, Italy, capital of the province of Bari, situated on a small peninsula projecting into the Adriatic, 69 m. N.W. of Brindisi by rail. Pop. (1901) 77,478. The town consists of two parts, the closely built old town on the peninsula to the N., and the new town to the S., which is laid out on a rectangular plan. The former contains the cathedral of S. Sabino, begun in 1035 but not completed till 1171: the exterior preserves in the main the fine original architecture (notably the dome and campanile), but the interior has been modernized. Not far off is the church of S. Nicola, founded in 1087 to receive the relics of this saint, which were brought from Myra in Lycia, and now lie beneath the altar in the crypt. The facade is fine, and the interior, divided into three naves by columns, with galleries over the aisles, has fortunately not been restored; the vaulting of the crypt has, however, been covered with modern stucco. The church is one of the four Palatine churches of Apulia (the others being the cathedrals of Acquaviva and Altamura, and the church of Monte S. Angelo sul Gargano). Adjacent is the small church of S. Gregorio, belonging also to the 11th century. The castle, built in 1169, and strengthened in 1233, lies on the W. side of the old town: it is now used as a prison. The old harbour lies on the E. side of the peninsula, and the new on the W. In the new town is the Ateneo, containing the provincial museum, with a large collection of vases found in the district, in which the pre-Hellenic specimens are especially important (M. Mayer in Römische Mitteilungen, 1897, 201; 1899, 13; 1904, 188, 276). Bari is the seat of the command of the IX. army corps, and the most important commercial town in Apulia. It manufactures olive oil, soap, carbon sulphide and playing-cards, and has a large iron foundry.

Barium does not seem to have been a place of great importance in early antiquity; only bronze coins struck by it have been found. In Roman times it was the point of junction between the coast road and the Via Traiana; there was also a branch road to Tarentum from Barium. Its harbour, mentioned as early as 181 B.C., was probably the principal one of the district in ancient times, as at present, and was the centre of a fishery. But its greatest importance dates from the time when it became, in 852, a seat of the Saracen power, and in 885, the residence of the Byzantine governor. In 1071 it was captured by Robert Guiscard. In 1095 Peter the Hermit preached the first crusade there. In 1156 it was razed to the ground, and has several times suffered destruction. In the 14th century it became an independent duchy, and in 1558 was left by Bona Sforza to Philip II. of Spain and Naples.

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(T. As.)

BARILI, a town of the province of Cebu, island of Cebu, Philippine Islands, on the Barili river, 2 m. from its mouth and about 35 m. S.W. of Cebu, the capital. Pop. (1903) 31,617. It has a relatively cool and healthful climate. Its people are agriculturists and raise Indian corn, sibucao, hemp, cacao and coffee. The language is Cebu-Visayan.

BARING, the name of a family of English financiers and bankers. The firm of Baring Brothers was founded by Francis Baring (1740-1810), whose father, John Baring, son of a Lutheran minister at Bremen, had come to England from Germany, and started a cloth manufactory at Larkbear, near Exeter. Francis Baring was born at Larkbear, and in due course was placed in a London commercial firm. In 1770, in conjunction with his brother John, Francis Baring established a banking-house in London, and before he died in 1810 had so developed the business that he was regarded as the first merchant in Europe. He was for many years a director of the East India Company, and chairman in 1792-1793, receiving a baronetcy for his services. From 1784-1806 he sat almost continuously in parliament as a Whig. He left five sons, of whom the eldest, Sir Thomas Baring (1772-1848), was a well-known art-patron and collector. The control of the business passed to his second son, Alexander (1774-1848), better known as Lord Ashburton, who had already been highly successful in extending the firm's operations in America, where his marriage with the daughter of William Bingham, a wealthy resident of Philadelphia and United States senator, secured him considerable influence with the American commercial community. From 1806-1835 he represented various constituencies in parliament where he strongly opposed reform. In 1834 he became president of the Board of Trade and master of the mint in Sir Robert Peel's first administration, and the following year was raised to the peerage as Baron Ashburton. His business capacity and intimate acquaintance with American customs and institutions caused

his appointment in 1842 as commissioner to the United States to negotiate the settlement of the north-eastern boundary question and other matters in dispute between the two countries, and he concluded in that year at Washington the treaty, commonly known as the Ashburton treaty, by which the frontier between Maine and Canada was fixed. After his death in 1848 the affairs of the house were managed by Thomas Baring (1799-1873), the son of Sir Thomas Baring. Thomas Baring represented Huntingdon in parliament from 1844 till his death. His elder brother, Sir Francis Thornhill Baring (1796-1866), sat for Portsmouth from 1826-1865. From 1839-1841 he was chancellor of the exchequer, and from 1849-1852 first lord of the admiralty. In 1866 he was created Baron Northbrook, the barony being converted in 1876 into an earldom in favour of his eldest son Thomas George Baring (1826-1904). The latter, the 1st Earl of Northbrook, was occupied almost entirely with public affairs, and filled at different times many important official positions. He is best remembered as viceroy of India, which office he held from 1872-1876, but his last public position was first lord of the admiralty (1880-1885). With the death of Thomas Baring, Edward Charles Baring (1828-1897), son of Henry Baring, M.P., and grandson of Sir Francis Baring, became head of the firm of Baring Brothers, and in 1885 was raised to the peerage as Baron Revelstoke. The house of Baring then stood at the height of its prosperity. During the following years a large amount of English capital was advanced to the Argentine Republic, Barings undertaking the loans and guaranteeing the interest. Through the continued default of the Argentine government, Barings became seriously involved, their heavy obligations precipitating a general financial crisis. Towards the end of 1890 it became known that the firm was on the eve of suspending payment, with liabilities amounting to £21,000,000. The prompt action of the Bank of England, which in conjunction with the leading joint-stock banks of the United Kingdom took over these liabilities, averted further disaster, and the firm of Baring Brothers was subsequently reorganized as a limited company with a capital of £1,000,000. Besides those already referred to, various other members of the Baring family have achieved public distinction, notably Charles Baring (1807-1879), bishop of Durham, and Evelyn Baring, 1st Earl of Cromer (q.v.).

BARING-GOULD, SABINE (1834-), English novelist, was born at Exeter on the 28th of January 1834. After graduating at Clare College, Cambridge, he spent some years in travel, and became in 1864 curate of Horbury, Yorkshire; then perpetual curate of Dalton, in the same county, in 1867; and in 1871 rector of East Mersea, Essex. On his father's death in 1872 he inherited the estate of Lew Trenchard, North Devon, where his family had been settled for nearly three centuries, and he exchanged his Essex living for the rectory of Lew Trenchard in 1881. He had a ready pen, and began publishing books on one subject or another—fiction, travel, history, folklore, religion, mythology, from 1854 onwards. His novel Mehalah (1880), the scene of which is laid on the east coast of England, was an excellent story, and among many others may be mentioned John Herring (1883), a tale of the west country; Court Royal (1886); Red Spider (1887); The Pennycomequicks (1889); Cheap Jack Zita (1893); and Broom Squire (1896), a Sussex tale. His contributions to the study of topography, antiquities and folk-lore, while popularly written, were also full of serious research and real learning, notably his Book of Werewolves (1865), Curious Myths of the Middle Ages (1866), Curious Survivals (1892). He produced at the same time many volumes of sermons and popular theology, and edited (1871-1873) The *Sacristy,* a quarterly review of ecclesiastical art and literature.

Living the life of the rapidly disappearing English "squarson," and full of cultivated interests, especially in humanizing the local village mind, and investigating and recording the good things of old-time, his many-sided activities were shown in every direction and his literary facility made his work known far and wide. His familiarity with the country-side and his interest in folk-lore were of special utility in recovering and preserving for publication a large mass of English popular song, and in assisting the new English movement for studying and appreciating the old national ballad-music.

BARINGO, a lake of British East Africa, some 30 m. N. of the equator in the eastern rift-valley. It is one of a chain of lakes which stud the floor of the valley and has an elevation of 3325 ft. above the sea. It is about 16 m. long by 9 broad and has an irregular outline, the northern shore being deeply indented. Its waters are brackish. Fed by several small streams it has no outlet. The largest of the rivers which enter it, the Tigrish and the Nyuki, run north through a flat marshy country which extends south of the lake. This district, inhabited by the negro tribe of Njamusi, was by the first explorers called Njemps. It is a fertile grain-growing region containing two considerable villages. The Njamusi are peaceful agriculturists who show marked friendliness to Europeans. N. of the lake rise the Karosi hills; to the E. the land rises in terraces to the edge of the Laikipia escarpment. A characteristic of the country in the neighbourhood of the lake are the "hills" of the termites (white ants). They are hollow columns 10 to 12 ft. high and from 1 ft. to 18 in. broad. The greater kudu, almost unknown elsewhere in East Africa, inhabits the flanks of the Laikipia escarpment to the east of the lake and comes to the foot-hills around Baringo to feed.

The existence of Lake Baringo was first reported in Europe by Ludwig Krapf and J. Rebmann, German missionaries stationed at Mombasa, about 1850; in J. H. Speke's map of the Nile sources (1863) Baringo is confused with Kavirondo Gulf of Victoria Nyanza; it figures in Sir H. M. Stanley's map (1877) as a large sheet of water N.E. of Victoria Nyanza. Joseph Thomson, in his journey through the Masai country in 1883, was the first white man to see the lake and to correct the exaggerated notions as to its size. Native tradition, however, asserts that the lake formerly covered a much larger area.

BARISAL, a town of British India, headquarters of Backergunje district in Eastern Bengal and

Assam, situated on a river of the same name. Pop. (1901) 18,978. It is an important centre of [v.03 p.0402] river trade, on the steamer route through the Sundarbans from Calcutta to the Brahmaputra. It contains a first grade college and several schools. There are a public library, established by subscription in 1858; and a students' union, for helping the sick and poor and promoting the intellectual and physical improvement of boys. Barisal has given its name to a curious physical phenomenon, known as the "Barisal guns," the cause of which has not been satisfactorily explained. These are noises, like the report of cannon, frequently heard in the channels of the delta of the Brahmaputra, at the rising of the tide.

> BARIUM (symbol Ba, atomic weight 137.37 [O=16]), one of the metallic chemical elements included in the group of the alkaline earths. It takes its name from the Greek βαρύς (heavy) on account of its presence in barytes or heavy spar which was first investigated in 1602 by V. Casciorolus, a shoemaker of Bologna, who found that after ignition with combustible substances it became phosphorescent, and on this account it was frequently called Bolognian phosphorus. In 1774 K. W. Scheele, in examining a specimen of pyrolusite, found a new substance to be present in the mineral, for on treatment with sulphuric acid it gave an insoluble salt which was afterwards shown to be identical with that contained in heavy spar. Barium occurs chiefly in the form of barytes or heavy spar, BaSO₄, and witherite, BaCO₃, and to a less extent in barytocalcite, baryto-celestine, and various complex silicates. The metal is difficult to isolate, and until recently it may be doubted whether the pure metal had been obtained. Sir H. Davy tried to electrolyse baryta, but was unsuccessful; later attempts were made by him using barium chloride in the presence of mercury. In this way he obtained an amalgam, from which on distilling off the mercury the barium was obtained as a silver white residue. R. Bunsen in 1854 electrolysed a thick paste of barium chloride and dilute hydrochloric acid in the presence of mercury, at 100° C., obtaining a barium amalgam, from which the mercury was separated by a process of distillation. A. N. Guntz (Comptes rendus, 1901, 133, p. 872) electrolyses a saturated solution of barium chloride using a mercury cathode and obtains a 3% barium amalgam; this amalgam is transferred to an iron boat in a wide porcelain tube and the tube slowly heated electrically, a good yield of pure barium being obtained at about 1000° C. The metal when freshly cut possesses a silver white lustre, is a little harder than lead, and is extremely easily oxidized on exposure; it is soluble in liquid ammonia, and readily attacks both water and alcohol.

> Three oxides of barium are known, namely, the monoxide, BaO, the dioxide, BaO2, and a suboxide, obtained by heating BaO with magnesium in a vacuum to 1100° (Guntz, loc. cit., 1906, p. 359). The monoxide is formed when the metal burns in air, but is usually prepared by the ignition of the nitrate, oxygen and oxides of nitrogen being liberated. It can also be obtained by the ignition of an intimate mixture of the carbonate and carbon, and in small quantities by the ignition of the iodate. It is a greyish coloured solid, which combines very energetically with water to form the hydroxide, much heat being evolved during the combination; on heating to redness in a current of oxygen it combines with the oxygen to form the dioxide, which at higher temperatures breaks up again into the monoxide and oxygen.

> Barium hydroxide, Ba(OH)₂, is a white powder that can be obtained by slaking the monoxide with the requisite quantity of water, but it is usually made on the large scale by heating heavy spar with small coal whereby a crude barium sulphide is obtained. This sulphide is then heated in a current of moist carbon dioxide, barium carbonate being formed, $BaS + H_2O + CO_2 = BaCO_3 + H_2O + CO_3 + H_2O + CO_3 + H_2O + H_2O$ $\rm H_2S$, and finally the carbonate is decomposed by a current of superheated steam, $\rm BaCO_3$ + $\rm H_2O$ = $Ba(OH)_2 + CO_2$, leaving a residue of the hydroxide. It is a white powder moderately soluble in cold water, readily soluble in hot water, the solution possessing an alkaline reaction and absorbing carbon dioxide readily. The solution, known as baryta-water, finds an extensive application in practical chemistry, being used in gas-analysis for the determination of the amount of carbon dioxide in the atmosphere; and also being used in organic chemistry as a hydrolysing agent for the decomposition of complex ureides and substituted aceto-acetic esters, while E. Fischer has used it as a condensing agent in the preparation of α - and β -acrose from acrolein dibromide. A saturated solution of the hydroxide deposits on cooling a hydrated form Ba(OH)₂. 8H₂O, as colourless quadratic prisms, which on exposure to air lose seven molecules of water of crystallization.

> Barium dioxide, BaO₂, can be prepared as shown above, or in the hydrated condition by the addition of excess of baryta-water to hydrogen peroxide solution, when it is precipitated in the crystalline condition as $BaO_2 \cdot 8H_2O$. These crystals on heating to 130° C. lose the water of crystallization and leave a residue of the anhydrous peroxide. In the Brin process for the manufacture of oxygen, barium dioxide is obtained as an intermediate product by heating barium monoxide with air under pressure. It is a grey coloured powder which is readily decomposed by dilute acids with the production of hydrogen peroxide.

> Barium chloride, $BaCl_2 \cdot 2H_2O$, can be obtained by dissolving witherite in dilute hydrochloric acid, and also from heavy spar by ignition in a reverberatory furnace with a mixture of coal, limestone and calcium chloride, the barium chloride being extracted from the fused mass by water, leaving a residue of insoluble calcium sulphide. The chloride crystallizes in colourless rhombic tables of specific gravity 3.0 and is readily soluble in water, but is almost insoluble in concentrated hydrochloric acid and in absolute alcohol. It can be obtained in the anhydrous condition by heating it gently to about 120° C. It has a bitter taste and is a strong poison. Barium bromide is prepared by saturating baryta-water or by decomposing barium carbonate with

hydrobromic acid. It crystallizes as $BaBr_2\cdot 2H_2O$ isomorphous with barium chloride. Barium bromate, $Ba(BrO_3)_2$, can be prepared by the action of excess of bromine on baryta-water, or by decomposing a boiling agueous solution of 100 parts of potassium bromate with a similar solution of 74 parts of crystallized barium chloride. It crystallizes in the monoclinic system, and separates from its aqueous solution as $Ba(BrO_3)_2 \cdot H_2O$. On heating, it begins to decompose at 260-265° C. Barium chlorate, Ba(ClO₃)₂, is obtained by adding barium chloride to sodium chlorate solution; on concentration of the solution sodium chloride separates first, and then on further evaporation barium chlorate crystallizes out and can be purified by recrystallization. It can also be obtained by suspending barium carbonate in boiling water and passing in chlorine. It crystallizes in monoclinic prisms of composition $Ba(ClO_3)_2 \cdot H_2O$, and begins to decompose on being heated to 250° C. Barium iodate, Ba(IO₃)₂, is obtained by the action of excess of iodic acid on hot caustic baryta solution or by adding sodium iodate to barium chloride solution. It crystallizes in monoclinic prisms of composition $Ba(IO_3)_2 \cdot H_2O$, and is only very sparingly soluble in cold water.

Barium carbide, BaC2, is prepared by a method similar to that in use for the preparation of calcium carbide (see Acetylene). L. Maquenne has also obtained it by distilling a mixture of barium amalgam and carbon in a stream of hydrogen. Barium sulphide, BaS, is obtained by passing sulphuretted hydrogen over heated barium monoxide, or better by fusion of the sulphate with a small coal. It is a white powder which is readily decomposed by water with the formation of the hydroxide and hydrosulphide. The phosphorescence of the sulphide obtained by heating the thiosulphate is much increased by adding uranium, bismuth, or thorium before ignition (J. pr. Chem., 1905, ii. p. 196).

Barium sulphate, BaSO₄, is the most abundant of the naturally occurring barium compounds (see Barytes) and can be obtained artificially by the addition of sulphuric acid or any soluble sulphate to a solution of a soluble barium salt, when it is precipitated as an amorphous white powder of specific gravity 4.5. It is practically insoluble in water, and is only very slightly soluble in dilute acids; it is soluble to some extent, when freshly prepared, in hot concentrated sulphuric acid, and on cooling the solution, crystals of composition $BaSO_4 \cdot H_2SO_4$ are deposited. It is used as a pigment under the name of "permanent white" or blanc fixe.

 $[v.03 \ p.0403]$ Barium nitride, Ba_3N_2 , is obtained as a brownish mass by passing nitrogen over heated barium amalgam. It is decomposed by water with evolution of hydrogen, and on heating in a current of carbonic oxide forms barium cyanide (L. Maquenne). Barium amide, Ba(NH₂)₂, is obtained from potassammonium and barium bromide.

> Barium nitrate, Ba(NO₃)₂, is prepared by dissolving either the carbonate or sulphide in dilute nitric acid, or by mixing hot saturated solutions of barium chloride and sodium nitrate. It crystallizes in octahedra, having a specific gravity of 3.2, and melts at 597° C. (T. Carnelley). It is decomposed by heat, and is largely used in pyrotechny for the preparation of green fire. Barium carbonate, $BaCO_3$, occurs rather widely distributed as witherite (q.v.), and may be prepared by the addition of barium chloride to a hot solution of ammonium carbonate, when it is precipitated as a dense white powder of specific gravity 4.3; almost insoluble in water.

> Barium and its salts can be readily detected by the yellowish-green colour they give when moistened with hydrochloric acid and heated in the Bunsenflame, or by observation of their spectra, when two characteristic green lines are seen. In solution, barium salts may be detected by the immediate precipitate they give on the addition of calcium sulphate (this serves to distinguish barium salts from calcium salts), and by the yellow precipitate of barium chromate formed on the addition of potassium chromate. Barium is estimated quantitatively by conversion into the sulphate. The atomic weight of the element has been determined by C. Marignac by the conversion of barium chloride into barium sulphate, and also by a determination of the amount of silver required to precipitate exactly a known weight of the chloride; the mean value obtained being 136.84; T. W. Richards (Zeit. anorg. Chem., 1893, 6, p. 89), by determining the equivalent of barium chloride and bromide to silver, obtained the value 137.44. For the relation of barium to radium, see Radioactivity.

> BARKER, EDMUND HENRY (1788-1839), English classical scholar, was born at Hollym in Yorkshire. He entered Trinity College, Cambridge, as a scholar in 1807, but left the university without a degree, being prevented by religious scruples from taking the oath then required. He had previously obtained (in 1809) the Browne medal for Greek and Latin epigrams. After acting as amanuensis to the famous Samuel Parr, the vicar of Hatton in Warwickshire, he married and settled down at Thetford in Norfolk, where he lived for about twenty-five years. He was in the habit of adding the initials O. T. N. (of Thetford, Norfolk) to the title-page of his published works. In later life he became involved in a law-suit in connexion with a will, and thus exhausted his means. In 1837-1838 he was a prisoner for debt in the king's bench and in the Fleet. He died in London on the 21st of March 1839. Barker was a prolific writer on classical and other subjects. In addition to contributing to the Classical Journal, he edited portions of several classical authors for the use of schools. He was one of the first commentators to write notes in English instead of Latin. In a volume of letters he disputed the claims of Sir Philip Francis to the authorship of the Letters of Junius; his Parriana (1828) is a vast and ill-digested compilation of literary anecdotes and criticisms. He also saw through the press the English edition of Lemprière's Classical Dictionary (revised by Anthon) and of Webster's English Dictionary. It is as a lexicographer, however, that Barker is chiefly known. While at Hatton, he conceived the design of a new edition

of Stephanus's *Thesaurus Graecae Linguae*. The work was undertaken by A. J. Valpy, and, although not expressly stated, it was understood that Barker was the responsible editor. When a few parts had appeared, it was severely criticized in the *Quarterly Review* (xxii., 1820) by Blomfield; the result was the curtailment of the original plan of the work and the omission of Barker's name in connexion with it. It was completed in twelve volumes (1816-1828). The strictures of the *Quarterly* were answered by Barker in his *Aristarchus Anti-Blomfieldianus*, which, although unconvincing, was in turn answered by Bishop Monk. He also published notes on the *Etymologicum Gudianum*, and collaborated with Professor Dunbar of Edinburgh in a Greek and English Lexicon (1831). The *editio princeps* (1820) of the treatise attributed to Arcadius, Π Eρì τόνων, was published by him from a Paris MS. Continental scholars entertained a more favourable opinion of him than those of his own country. He expressed contempt for the minute verbal criticism of the Porsonian school, in which he was himself deficient.

An account of his life will be found in the *Gentleman's Magazine* for May 1839; see also *Notes and Queries* (6th series, xii. p. 443), where a full list of his works is given.

BARKER'S MILL, a mechanical contrivance invented by a Dr Barker about the end of the 17th century. It consisted of a hollow vertical cylinder, provided with a number of horizontal arms fitted with lateral apertures; the contrivance is mounted so as to rotate about the vertical axis. By allowing water to enter the vertical tube, a rotation, due to the discharge through the lateral orifices, is set up.

BARKING, a market-town in the Romford parliamentary division of Essex, England, on the river Roding near its junction with the Thames, 8 m. E. of Fenchurch Street station and Liverpool Street station, London, by the London, Tilbury & Southend and Great Eastern railways. Pop. of urban district of Barking town (1891) 14,301; (1901) 21,547. The church of St Margaret is Norman with perpendicular additions, and contains many monuments of interest. Barking was celebrated for its nunnery, one of the oldest and richest in England, founded about 670 by Erkenwald, bishop of London, and restored in 970 by King Edgar, about a hundred years after its destruction by the Danes. The abbess was a baroness *ex officio*, and the revenue at the dissolution of the monasteries was £1084. There remains a perpendicular turreted gateway. There is also an ancient market-house, used as a town-hall. Victoria Gardens form a public pleasure-ground, and there are recreation grounds. The Gaslight and Coke Company's works at Beckton are in the parish, and also extensive rubber works. At the mouth of the Roding (Barking Creek) are great sewage works, receiving the Northern Outfall sewer from London. There are also chemical works, and some shipping trade, principally in timber and fish. Barking is a suffragan bishopric in the diocese of St Albans.

BARKLY EAST, a town of Cape province, South Africa, capital of a district of the same name, and 80 m. by rail E.S.E. of Aliwal North. The town lies north of the Drakensberg on the Kraai tributary of the Orange river at an elevation of 5831 ft. The district has an area of 1564 sq. m. and a population (1904) of 8490, of whom 50% are whites. The chief occupation followed is sheep-farming, the pasturage being excellent. Like Barkly West, the town and district are named after Sir Henry Barkly, governor of Cape Colony, 1870-1877.

BARKLY WEST, a town of Cape province, South Africa, 21 m. N.W. of Kimberley, capital of a district and of an electoral division of the same name in Griqualand West. It is built on the right bank of the Vaal, here spanned by a bridge. Pop. (1904) 1037. Originally called Klipdrift, the town was the first founded by the diggers after the discovery in 1867 of diamonds along the valley of the Vaal, and it had for some years a large floating population. On the discovery of the "dry diggings" at Kimberley, the majority of the diggers removed thither. Barkly West remains, however, the centre of the alluvial diamonds industry. The diamonds of this district are noted for their purity and lustre, and are generally associated with other crystals—garnets, agates, quartz and chalcedonies.

Barkly West electoral division includes the whole of Griqualand West save the Kimberley division. It is divided into the fiscal districts of Barkly West, Hay and Herbert, with a total pop. (1904) of 48,388, of whom 12,170 are whites (see Griqualand).

BARLAAM AND JOSAPHAT, one of the most popular and widely disseminated of medieval religious romances, which owes its importance and interest to the fact that it is a Christianized version of the story of Gautama Siddharta, the Buddha, with which it agrees not only in broad outline but in essential details.

The Christian story first appears in Greek among the works of John (q.v.) of Damascus, who flourished in the early part of the 8th century, and who, before he adopted the monastic life, had held high office at the court of the caliph Abū Ja'far al-Mansūr, as his father Sergius is said to have done before him.

The outline of the Greek story is as follows:—St Thomas had converted the people of India, and after the eremitic life originated in Egypt, many Indians adopted it. But a powerful pagan king arose who hated and persecuted the Christians, especially the ascetics. After this king, Abenner by name, had long been childless, a boy greatly desired and matchless in beauty, was born to him and received the name of Josaphat. The king, in his joy, summons astrologers to predict the child's destiny. They foretell glory and prosperity beyond those of all his predecessors. One sage, most learned of all, assents, but intimates that the scene of this glory will be, not the paternal kingdom, but another infinitely more exalted, and that the child will adopt the faith which his father persecutes.

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The boy shows a thoughtful and devout turn. King Abenner, troubled by this and by the remembrance of the prediction, selects a secluded city, in which he causes a splendid palace to be built, where his son should abide, attended only by tutors and servants in the flower of youth and health. No stranger was to have access, and the boy was to be cognizant of none of the sorrows of humanity, such as poverty, disease, old age or death, but only of what was pleasant, so that he should have no inducement to think of the future life; nor was he ever to hear a word of Christ and His religion.

Prince Josaphat grows up in this seclusion, acquires all kinds of knowledge and exhibits singular endowments. At length, on his urgent prayer, the king reluctantly permits him to pass the limits of the palace, after having taken all precautions to keep painful objects out of sight. But through some neglect of orders, the prince one day encounters a leper and a blind man, and asks of his attendants with pain and astonishment what such a spectacle should mean. These, they tell him, are ills to which man is liable. Shall all men have such ills? he asks. And in the end he returns home in deep depression. Another day he falls in with a decrepit old man, and stricken with dismay at the sight, renews his questions and hears for the first time of death. And in how many years, continues the prince, does this fate befall man? and must he expect death as inevitable? Is there *no* way of escape? No means of eschewing this wretched state of decay? The attendants reply as may be imagined; and Josaphat goes home more pensive than ever, dwelling on the certainty of death and on what shall be thereafter.

At this time Barlaam, an eremite of great sanctity and knowledge, dwelling in the wilderness of Sennaritis, divinely warned, travels to India in the disguise of a merchant, and gains access to Prince Josaphat, to whom he imparts the Christian doctrine and commends the monastic life. Suspicion arises and Barlaam departs. But all attempts to shake the prince's convictions fail. As a last resource the king sends for Theudas, a magician, who removes the prince's attendants and substitutes seductive girls; but all their blandishments are resisted through prayer. The king abandons these efforts and associates his son in the government. The prince uses his power to promote religion, and everything prospers in his hands. At last Abenner himself yields to the faith, and after some years of penitence dies. Josaphat surrenders the kingdom to a friend called Barachias and departs for the wilderness. After two years of painful search and much buffeting by demons he finds Barlaam. The latter dies, and Josaphat survives as a hermit many years. King Barachias afterwards arrives, and transfers the bodies of the two saints to India, where they are the source of many miracles.

Now this story is, mutatis mutandis, the story of Buddha. It will suffice to recall the Buddha's education in a secluded palace, his encounter successively with a decrepit old man, with a man in mortal disease and poverty, with a dead body, and, lastly, with a religious recluse radiant with peace and dignity, and his consequent abandonment of his princely state for the ascetic life in the jungle. Some of the correspondences in the two stories are most minute, and even the phraseology, in which some of the details of Josaphat's history are described, almost literally renders the Sanskrit of the Lalita Vistara. More than that, the very word Joasaph or Josaphat (Arabic, Yūdasatf) is a corruption of Bodisat due to a confusion between the Arabic letters for Y and B, and Bodisatva is a common title for the Buddha in the many birth-stories that clustered round the life of the sage. There are good reasons for thinking that the Christian story did not originate with John of Damascus, and a strong case has been made out by Zotenberg that it reflects the religious struggles and disputes of the early 7th century in Syria, and that the Greek text was edited by a monk of Saint Saba named John, his version being the source of all later texts and translations. How much older than this the Christian story is, we cannot tell, but it is interesting to remember that it embodies in the form of a speech the "Apology" of the 2ndcentury philosopher Aristides. After its appearance among the writings of John of Damascus, it was incorporated with Simeon Metaphrastes' Lives of the Saints (c. 950), and thence gained great voque, being translated into almost every European language. A famous Icelandic version was made for Prince Hakon early in the 13th century. In the East, too, it took on new life and Catholic missionaries freely used it in their propaganda. Thus a Tagala (Philippine) translation was brought out at Manila in 1712. Besides furnishing the early playwrights with material for miracle plays, it has supplied episodes and apologues to many a writer, including Boccaccio, John Gower and Shakespeare. Rudolph of Ems about 1220 expanded it into a long poem of 16,000 lines, celebrating the victory of Christian over heathen teaching. The heroes of the romance have even attained saintly rank. Their names were inserted by Petrus de Natalibus in his Catalogus Sanctorum (c. 1380), and Cardinal Baronius included them in the official Martyrologium authorized by Sixtus V. (1585-1590) under the date of the 27th of November. In the Orthodox Eastern Church "the holy Josaph, son of Abener, king of India" is allotted the 26th of August. Thus unwittingly Gautama the Buddha has come to official recognition as a saint in two great branches of the Catholic Church, and no one will say that he does not deserve the honour. A church dedicated Divo Josaphat in Palermo is probably not the only one of its kind.

The identity of the stories of Buddha and St Josaphat was recognized by the historian of Portuguese India, Diogo do Couto (1542-1616), as may be seen in his history (*Dec.* v. liv. vi. cap. 2). In modern times the honour belongs to Laboulaye (1859), Felix Liebrecht in 1860 putting it beyond dispute. Subsequent researches have been carried out by Zotenberg, Max Müller, Rhys Davids, Braunholtz and Joseph Jacobs, who published his *Barlaam and Josaphat* in 1896.

BAR-LE-DUC, a town of north-eastern France, capital of the department of Meuse, 50 m. E.S.E. of Châlons-sur-Marne, on the main line of the Eastern railway between that town and Nancy. Pop. (1906) 14,624. The lower, more modern and busier part of the town extends along a narrow

valley, shut in by wooded or vine-clad hills, and is traversed throughout its length by the Ornain, which is crossed by several bridges. It is limited towards the north-east by the canal from the Marne to the Rhine, on the south-west by a small arm of the Ornain, called the Canal des Usines, on the left bank of which the upper town (Ville Haute) is situated. The Ville Haute, which is reached by staircases and steep narrow thoroughfares, is intersected by a long, quiet street, bordered by houses of the 15th, 16th and 17th centuries. In this quarter are the remains (16th century) of the château of the dukes of Bar, dismantled in 1670, the old clock-tower and the college, built in the latter half of the 16th century. Its church of St Pierre (14th and 15th centuries) contains a skilfully-carved effigy in white stone of a half-decayed corpse, the work of Ligier Richier (1500-1572), a pupil of Michelangelo-erected to the memory of René de Châlons (d. 1544). The lower town contains the official buildings and two or three churches, but these are of little interest. Among the statues of distinguished natives of the town is one to Charles Nicolas Oudinot, whose house serves as the hôtel-de-ville. Bar-le-Duc has tribunals of first instance and of commerce, a board of trade arbitrators, a lycée, a training-college for girls, a chamber of commerce, a branch of the Bank of France and an art museum. The industries of the town include iron-founding and the manufacture of machinery, corsets, hosiery, flannel goods, jam and wall-paper, and brewing, cotton spinning and weaving, leather-dressing and dyeing. Wine, timber and iron are important articles of commerce.

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Bar-le-Duc was at one time the seat of the countship, later duchy, of Bar, the history of which is given below. Though probably of ancient origin, the town was unimportant till the 10th century when it became the residence of the counts.

COUNTS AND DUKES OF BAR. In the middle of the 10th century the territory of Bar (Barrois) formed a dependency of the Empire. In the 11th century its lords were only counts by title; they belonged to the house of Mousson (which also possessed the countships of Montbéliard and Ferrette), and usually fought in the French ranks, while their neighbours, the dukes of Lorraine, adhered to the German side. Theobald I., count of Bar, was an ally of Philip Augustus, as was also his son Henry II., who distinguished himself at the battle of Bouvines in 1214. But sometimes the counts of Bar bore arms against France. In 1301 Henry III. having made an alliance with Edward I. of England, whose daughter he had married, was vanquished by Philip the Fair, who forced him to do homage for a part of Barrois, situated west of the Meuse, which was called Barrois mouvant. In 1354 Robert, count of Bar, who had married the daughter of King John, was made marquis of Pont-à-Mousson by the emperor Charles IV. and took the title of duke of Bar. His successor, Edward III., was killed at Agincourt in 1415. In 1419 Louis of Bar, brother of the last-named, a cardinal and bishop of Châlons, gave the duchy of Bar to René of Anjou, the grandson of his sister Yolande, who married Isabella, duchess of Lorraine. Yolande of Anjou, who in 1444 had married Ferri of Lorraine, count of Vaudémont, became heiress of Nicholas of Anjou, duke of Calabria and of Lorraine, in 1473, and of René of Anjou, duke of Bar, in 1480; thus Lorraine, with Barrois added to it, once more returned to the family of its ancient dukes. United with Lorraine to France in 1634, Barrois remained, except for short intervals, part of the royal domain. It was granted in 1738 to Stanislaus Leszczynski, ex-king of Poland, and on his death in 1766 was once more attached to the crown of France.

(M. P.*)

BARLETTA (anc. *Barduli*), a seaport town and episcopal see of Apulia, Italy, on the E.S.E. coast, in the province of Bari, 34½ m. W.N.W. of Bari by rail. Pop. (1901) 42,022. Its importance dates from the time of the Hohenstaufen. The Gothic church of S. Sepolcro was built at the close of the 12th century, and the Romanesque cathedral was begun at the same period, but added to later. In front of the former church stands a bronze statue, 14 ft. in height, of the emperor Heraclius. The castle behind the cathedral dates from 1537. The harbour is good. It was cleared by 508 sailing-vessels and 461 steamers, the latter with a total tonnage of 364,904 in 1904; the exports were of the value of £180,699 (principally wine, sulphur, oil, tartar and tartaric acid), and the imports £92,486 (coal, timber and sundries).

In the neighbourhood (between Andria and Corato), during the siege of Barletta by the French in 1503, the town being defended by the Spanish army, a combat took place between thirteen picked knights of Italy and France, which resulted in favour of the former: it has been celebrated by Massimo d' Azeglio in his *Disfida di Barletta*. Seven miles to the N.W. are the salt-works of Barletta, now known under the name of Margherita di Savoia.

(T. As.)

BARLEY (Hordeum sativum), a member of the grass family, and an important cereal which belongs peculiarly to temperate regions. It originated from a wild species, H. spontaneum, a native of western Asia and has been cultivated from the earliest times. Three subspecies or races are recognized, (i.) H. sativum, subsp. distichum (described by Linnaeus as a distinct species, H. distichon), two-rowed barley. Only the middle spikelet of each triplet is fertile; the ear has therefore only two longitudinal rows of grain, and the spikes are strongly compressed laterally. This approaches most nearly to the wild stock, from which it is distinguished by the non-jointed axis and somewhat shorter awns. This is the race most commonly grown in the British Isles and in central Europe, and includes a large number of sub-races and varieties among which are the finest malting-barleys. The chief sub-races are (a) peacock, fan or battledore barley, described by Linnaeus as a distinct species, H. zeocriton, with erect short ears about 2½ in. long, broad at the base and narrow at the tip, suggesting an open fan or peacock's tail; (b) erect-eared barleys (var. erectum) with erect broad ears and closely-packed plump grains; (c) nodding barleys (var.

nutans). The ripe ears of the last hang so as to become almost parallel with the stem; they are narrower and longer than in (b), owing to the grains being placed farther apart on the rachis; it includes the Chevalier variety, one of the best for malting purposes, (ii.) H. sativum, subsp. hexastichum, six-rowed barley (the H. hexastichon of Linnaeus). All the flowers of each triplet of spikelets on both sides of the rachis are fertile and produce ripe fruits; hence the ear produces six longitudinal rows of grain. The ears are short, erect, and the grain thin and coarse; the straw is also short. It is a hardy race, but owing to the poor quality of the grain is rarely met with in Great Britain, (iii.) H. sativum, subsp. vulgare, bere, bigg or four-rowed barley (the H. vulgare of Linnaeus). All the flowers of each triplet are fertile as in (ii.), but the rows are not arranged regularly at equal distances round the rachis. The central fruits of each triplet form two regular rows, but the lateral spikelets form not four straight single rows as in (ii.), but two regular double rows, the whole ear appearing irregularly four-rowed. This race seems to be of later origin than the others. The ears are erect, about 2½ in. long, the grains thinner and longer than in the tworowed race, and the awns stiff and firmly adhering to the flowering glume. The var. pallidum is the barley most frequently cultivated in northern Europe and northern Asia. This race was formerly used for malt and beer, but owing to its larger amount of gluten as compared with starch it is less adapted for brewing than the two-rowed sorts. To this belong the varieties naked barley (H. coeleste and H. nudum) and Himalayan barley (H. trifurcatum and H. aegiceras). In both the fruits fall out freely from the glume, and in the latter the awns are three-pronged and shorter than the grain.

Barley is the most hardy of all cereal grains, its limit of cultivation extending farther north than any other; and, at the same time, it can be profitably cultivated in sub-tropical countries. The opinion of Pliny, that it is the most ancient aliment of mankind, appears to be well-founded, for no less than three varieties have been found in the lake dwellings of Switzerland, in deposits belonging to the Stone Period. According to Professor Heer these varieties are the common two-rowed (*H. distichum*), the large six-rowed (*H. hexastichum*, var. densum), and the small six-rowed (*H. hexastichum*, var. sanctum). The last variety is both the most ancient and the most commonly found, and is the sacred barley of antiquity, ears of which are frequently represented plaited in the hair of the goddess Ceres, besides being figured on ancient coins. The cultivation of barley in ancient Egypt is indicated in Exod. ix. 31. Till within recent times barley formed an important source of food in northern countries, and barley cakes are still to some extent eaten. Owing, however, to its poverty in that form of nitrogenous compound called gluten, so abundant in wheat, barley-flour cannot be baked into vesiculated bread; still it is a highly-nutritious substance, the salts it contains having a high proportion of phosphoric acid. The following is the composition of barley-meal according to Von Bibra, omitting the salts:—

| Water | 15 | per cent. |
|-----------------------|--------|-----------|
| Nitrogenous compounds | 12.981 | . " |
| Gum | 6.744 | . " |
| Sugar | 3.200 |) " |
| Starch | 59.950 |) " |
| Fat | 2.170 |) " |

Barley is now chiefly cultivated for malting (see Malt) to prepare spirits and beer (see Brewing), but it is also largely employed in domestic cookery. For the latter purpose the hard, somewhat flinty grains are preferable, and they are prepared by grinding off the outer cuticle which forms "pot barley." When the attrition is carried further, so that the grain is reduced to small round pellets, it is termed "pearl barley." Patent barley is either pot or pearl barley reduced to flour. Under the name *decoctum hordei*, a preparation of barley is included in the British Pharmacopoeia, which is of value as a demulcent and emollient drink in febrile and inflammatory disorders.

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Cultivation.—Apart from the growth-habits of the plant itself, the consideration that chiefly determines the routine of barley cultivation is the demand on the part of the maltster for uniformity of sample. Less care is required in its cultivation when it is intended for feeding live-stock. It is essential that the grains on the maltster's floor should germinate simultaneously, hence at the time of reaping, the whole crop must be as nearly as possible in the same stage of maturity. On rich soils the crop is liable to grow too rapidly and yield a coarse, uneven sample, consequently the best barley is grown on light, open and preferably calcareous soils, while if the condition of the soil is too high it is often reduced by growing wheat before the barley.

Barley (see Agriculture, *Crops and Cropping*) is a rapidly-growing and shallow-rooted plant. The upper layer of the soil must therefore be free from weeds, finely pulverized and stocked with a readily-available supply of nutriment. In most rotations barley is grown after turnips, or some other "cleaning" crop, with or without the interposition of a wheat crop. The roots are fed off by sheep during autumn and early winter, after which the ground is ploughed to a depth of 3 or 4 in. only in order not to put the layer of soil fertilized by the sheep beyond reach of the plant. The ground is then left unworked and open to the crumbling influence of frost till towards the end of winter, when it is stirred with the cultivator followed by the harrows, or in some cases ploughed with a shallow furrow. The seed, which should be plump, light in colour, with a thin skin covered by fine wrinkles, is sown in March and early April^[1] at the rate of from 8 to 12 pecks to the acre and lightly harrowed in. As even distribution at a uniform depth is necessary, the drill is preferred to the broadcast-seeder for barley sowing. In early districts seeding may take place as early as February, provided a fine tilth is obtainable, but it rarely extends beyond the end of

April. If artificial manures are used, a usual dressing consists of 2 or 3 cwt. of superphosphate to the acre at the time of sowing, followed, if the ground is in poor condition, by 1 cwt. of nitrate of soda when the plant is showing. Nitrogen must, however, be applied with caution as it makes the barley rich in albumen, and highly albuminous barley keeps badly and easily loses its germinating capacity. Farm-yard manure should also be avoided. After-cultivation may comprise rolling, harrowing (to preserve the fineness of the tilth) and in some districts hoeing. Barley is cut, either with scythe or machine, when it is quite ripe with the ears bending over. The crop is often allowed to lie loose for a day or two, owing to the belief that sunshine and dews or even showers mellow it and improve its colour. It may even be stacked without tying into sheaves, though this course involves greater expenditure of labour in carrying and afterwards in threshing. There is a prejudice against the use of the binder in reaping barley, as it is impossible to secure uniformity of colour in the grain when the stalks are tightly tied in the sheaf, and the sun has not free access to those on the inside. In any case it must not be stacked while damp, and if cut by machine is therefore sometimes tied in sheaves and set up in stocks as in the case of wheat. The above sketch indicates the general principles of barley-cultivation, but in practice they are often modified by local custom or farming exigencies.

Barley is liable to smut and the other fungus diseases which attack wheat (q.v.), and the insect pests which prey on the two plants are also similar. The larvae of the ribbon-footed corn-fly (*Chlorops taeniopus*) caused great injury to the barley crop in Great Britain in 1893, when the plant was weakened by extreme drought. A fair crop of barley yields about 36 bushels (56 lb to the bushel) per acre, but under the best conditions 40 and 50 bushels may be obtained. The yield of straw is from 15 to 20 cwt. per acre. Barley-straw is considered inferior both as fodder and litter.

[1] Barley is occasionally sown in autumn to provide keep for sheep in the following spring.

BARLEY-BREAK, an old English country game frequently mentioned by the poets of the 17th and 18th centuries. It was played by three pairs composed of one of each sex, who were stationed in three bases or plots, contiguous to each other. The couple occupying the middle base, called *hell* or *prison*, endeavoured to catch the other two, who, when chased, might *break* to avoid being caught. If one was overtaken, he and his companion were condemned to *hell*. From this game was taken the expression "the last couple in hell," often used in old plays.

BARLEY-CORN, a grain of barley, and thus a measure taken from the length of a grain of barley, three of which (sometimes four) were considered to make up an inch. The barley-corn has been personified as representing the malt liquor made from barley, as in Burns's song "John Barleycorn."

BARLOW, SIR GEORGE HILARO (1762-1847), Anglo-Indian statesman, was appointed to the Bengal Civil Service in 1778, and in 1788 carried into execution the permanent settlement of Bengal. When the marquess of Cornwallis died in 1805, Sir George Barlow was nominated provisional governor-general, and his passion for economy and retrenchment in that capacity has caused him to be known as the only governor-general who diminished the area of British territory; but his nomination was rejected by the home government, and Lord Minto was appointed. Subsequently Barlow was created governor of Madras, where his want of tact caused a mutiny of officers in 1809, similar to that which had previously occurred under Clive. In 1812 he was recalled, and lived in retirement until his death in February 1847. He was created a baronet in 1803.

BARLOW, JOEL (1754-1812), American poet and politician, born in Redding, Fairfield county, Connecticut, on the 24th of March 1754. He graduated at Yale in 1778, was a post-graduate student there for two years, and from September 1780 until the close of the revolutionary war was chaplain in a Massachusetts brigade. He then, in 1783, removed to Hartford, Connecticut, established there in July 1784 a weekly paper, the American Mercury, with which he was connected for a year, and in 1786 was admitted to the bar. At Hartford he was a member of a group of young writers including Lemuel Hopkins, David Humphreys, and John Trumbull, known in American literary history as the "Hartford Wits." He contributed to the Anarchiad, a series of satirico-political papers, and in 1787 published a long and ambitious poem, The Vision of Columbus, which gave him a considerable literary reputation and was once much read. In 1788 he went to France as the agent of the Scioto Land Company, his object being to sell lands and enlist immigrants. He seems to have been ignorant of the fraudulent character of the company, which failed disastrously in 1790. He had previously, however, induced the company of Frenchmen, who ultimately founded Gallipolis, Ohio, to emigrate to America. In Paris he became a liberal in religion and an advanced republican in politics. He remained abroad for several years, spending much of his time in London; was a member of the obnoxious "London Society for Constitutional Information"; published various radical essays, including a volume entitled Advice to the Privileged Orders (1792), which was proscribed by the British government; and was made a citizen of France in 1792. He was American consul at Algiers in 1795-1797, securing the release of American prisoners held for ransom, and negotiating a treaty with Tripoli (1796). He returned to America in 1805, and lived near Washington, D.C., until 1811, when he became American plenipotentiary to France, charged with negotiating a commercial treaty with Napoleon, and with securing the restitution of confiscated American property or indemnity therefor. He was summoned for an interview with Napoleon at Wilna, but failed to see the emperor there; became involved in the retreat of the French army; and, overcome by exposure, died at the Polish village of Zarnowiec on the 24th of December 1812. In 1807 he had published

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in a sumptuous volume the *Columbiad*, an enlarged edition of his *Vision of Columbus*, more pompous even than the original; but, though it added to his reputation in some quarters, on the whole it was not well received, and it has subsequently been much ridiculed. The poem for which he is now best known is his mock heroic *Hasty Pudding* (1793). Besides the writings mentioned above, he published *Conspiracy of Kings, a Poem addressed to the Inhabitants of Europe from another Quarter of the Globe* (1792); *View of the Public Debt, Receipts and Expenditure of the United States* (1800); and the *Political Writings of Joel Barlow* (2nd ed., 1796). He also published an edition, "corrected and enlarged," of Isaac Watt's *Imitation of the Psalms of David* (1786).

See C. B. Todd's *Life and Letters of Joel Barlow* (New York and London, 1886); and a chapter, "The Literary Strivings of Joel Barlow," in M. C. Tyler's *Three Men of Letters* (New York and London, 1895).

BARLOW, PETER (1776-1862), English writer on pure and applied mathematics, was born at Norwich in 1776 and died on the 1st of March 1862. In 1806 he was appointed mathematical master in the Woolwich Academy, and filled that post for forty-one years. In 1823 he was made a fellow of the Royal Society, and two years later received the Copley medal. Steam locomotion received much attention at his hands, and he sat on the railway commissions of 1836, 1839, 1842, 1845. He received many distinctions from British and foreign scientific societies. Barlow's principal works are—Elementary Investigation of the Theory of Numbers (1811); New Mathematical and Philosophical Dictionary (1814); Essay on Magnetic Attractions (1820). The investigations on magnetism led to the important practical discovery of a means of rectifying or compensating compass errors in ships. Besides compiling numerous useful tables, he contributed largely to the Encyclopaedia Metropolitana.

BARM (a word common to Teutonic languages), the scum formed on the top of malt liquor when fermenting; yeast used to leaven bread, or to set up fermentation in liquor.

BARMECIDES, more accurately BARMAKIDS, a noble Persian family which attained great power under the Abbasid caliphs. Barmak, the founder of the family, was a Persian fire-worshipper, and is supposed to have been a native of Khorasan. According to tradition, his wife was taken for a time into the harem of Abdallah, brother of Kotaiba the conqueror of Balkh, and became the mother of Khalid b. Barmak the Barmecide. Barmak subsequently (about A.D. 736) rebuilt and adorned his native city of Balkh after the rebellion of Harith. The family prospered, and his grandson Yahyā b. Khalid was the vizier of the caliph Mahdi and tutor of Harūn al-Rashid. His sons Fadl and Ja'far (the Giafar of the Arabian Nights) both occupied high offices under Harūn. The story of their disgrace, though romantic, is not improbable. Harun, it is said, found his chief pleasure in the society of his sister 'Abbāsa and Ja'far, and in order that these two might be with him continuously without breach of etiquette, persuaded them to contract a purely formal marriage. The conditions were, however, not observed and Harūn, learning that 'Abbāsa had borne a son, caused Ja'far suddenly to be arrested and beheaded, and the rest of the family except Mahommed, Yaḥyā's brother, to be imprisoned and deprived of their property. It is probable, however, that Harūn's anger was caused to a large extent by the insinuations of his courtiers that he was a mere puppet in the hands of a powerful family. See further Caliphate, section C, §§ 4, 5.

The expression "Barmecide Feast," to denote an imaginary banquet, is drawn from one of the tales ("The Barber's Tale of his Sixth Brother") in the Arabian Nights, in which a series of empty dishes is served up to a hungry man to test his sense of humour by one of the Barmecides (see edition by L. C. Smithers, Lond., 1894, vol. i. 317).

BARMEN, a town of Germany, in the Prussian Rhine province and the governmental district of Düsseldorf. Pop. (1816) 19,030; (1890) 116,144; (1905) 156,148. It is served by the main railway from Berlin to Aix-la-Chapelle, and lies immediately east of Elberfeld, with which it virtually forms one town. It stretches for some 4 m. along the narrow valley of the river Wupper, which, within the municipal boundaries, is crossed by twenty bridges. High wooded hills surround it. It is divided into three main districts, Upper, Middle and Lower Barmen, and is connected, throughout its length, with Elberfeld, by railway, tramway, and a suspended trolley line, hanging over the bed of the Wupper. It contains nine Evangelical and two Roman Catholic churches, a stately modern town hall, a Hall of Fame (Ruhmeshalle), with statues of the emperors William I. and Frederick III., a theatre, a picture-gallery, an ethnographical museum, and an exchange. There are many public monuments, one to Bismarck another to the poet Emil Rittershaus (1834-1897), a native of the town, and one commemorative of the Franco-German War of 1870-71. There are several high-grade public schools, academies of technical science, engineering and textile industry, and a missionary theological seminary. Barmen is one of the most important manufacturing centres of Germany. The rapid development of its commercial activity only dates from the beginning of the 19th century. It is the chief seat of ribbon weaving in Germany, and manufactures thread, lace, braids, cotton and cloth goods, carpets, silks, machinery, steel wares, plated goods and buttons, the last industry employing about 15,000 hands. There are numerous bleaching-fields, print-fields and dyeworks famous for their Turkey-red, soap works, chemical works and potteries. There are also extensive breweries. Its export trade, particularly to the United States, is very considerable. The hills lying S. of the town are laid out in public grounds. Here are a health resort, a tower commanding an extensive view, and numerous villas. Barmen, although mentioned in chronicles in the 11th century, did not attain civic rights until 1808, when it was formed into a municipality by the grand-duke of Berg.

See A. Shadwell, Industrial Efficiency (1906), for a good description of the industrial aspect.

BARMOTE COURT (also written Berghmote, Barghmote, Barghmote, Barghmote), a name applied to courts held in the lead-mining districts of Derbyshire, England, for the purpose of determining the customs peculiar to the industry and also for the settlements of any disputes which may arise in connexion therewith. Barmote courts are of very ancient origin, having been in existence in the reign of Edward I. Their jurisdiction extends both to the crown lands in the duchy of Lancaster and to those under individual ownership, comprising seven clearly defined districts. Owing to the progress made in modern mining, many of the customs and much of the procedure had become obsolete, and their powers were regulated by the High Peak Mining Customs and Mineral Courts Act 1851. An appeal from the jurisdiction of the courts lies by way of *certiorari*.

BARMOUTH (*Abermaw*, mouth of the Maw, or Mawddach, in Cardigan Bay, the only haven in Merionethshire, North Wales), a small seaport on the north of the estuary. Pop. of urban district (1901), 2214. The ride to Dolgelley (Dolgellau) is fine. The parish church, Llanaber, 1½ m. from Barmouth, is on a cliff overlooking the sea. Barmouth is a favourite bathing place, on the Cambrian railway. It is a centre for coaching in summer, especially to and through the Vale of Llangollen.

BARNABAS, in the New Testament, the surname, according to Acts iv. 36, given by the apostles (possibly in contrast to Joseph Barsabbas, Acts i. 23) to Joseph, "a Levite, a man of Cyprus by birth," who, though like Paul not of the Twelve, came like him to rank as an apostle (Acts xiv. 4, 14, 1 Cor. ix. 6; see Apostle). The Greek rendering of this Semitic name υίὸς παρακλήσεως) may be translated "son of consolation" (as in the A.V.), or "son of exhortation" (as in the R.V.). But there is an initial difficulty about the Greek rendering itself, as no satisfactory etymology of Barnabas in this sense has as yet been suggested. The one at present in favour on the ground of philological analogy (see Z.N.T.W., 1906, p. 91 for a fresh instance), viz. Bar-Nebo, lacks intrinsic fitness for a Jew and a Levite, and of course does not accord with the statement in Acts itself. Hence it still seems best to assume some unknown Aramaic form equivalent to παράκλησις, and then to take the latter in the sense of comfort or encouragement. This rendering, rather than "exhortation" in the sense of eloquence, best suits the usage of Acts, which suggests such comfort as is given by encouraging rather than rousing words (ix. 31, xi. 23, xiii. 15, xv. 31 f.; cf. Luke ii. 25, vi. 24). All we hear of Barnabas points to goodness of heart ("a good man," xi. 24) as his distinctive quality, giving fineness of perception (ix. 27, xi. 25 f.) and large insight into essentials (xi. 23 f.). It was probably the practically helpful and encouraging form that his gift as a "prophet" took (Acts xiii. i, with 1 Cor. xiv. 3). It is perhaps significant that his first appearance is of the generously helpful kind described in Acts iv. 36 f. Yet we must beware of regarding Barnabas as merely a fine character; he plays too prominent a part in the New Testament for any such limitation. Thus, he next appears as braving the suspicions which dogged the ex-persecutor Saul (Paul)—possibly an old acquaintance in Hellenist circles at Jerusalem (cf. vi. 9, ix. 29)—and introducing him to the older apostles (ix. 27). More suggestive still of high repute as a man of insight and authority is his mission from the Jerusalem Church to inspect and judge of the new departure in the Gospel at Antioch, in Acts xi. 22. This means very much, though his modesty led him to call in the aid of his friend Saul to cope with the new and expanding situation (25 f.). After their brief joint visit to Judaea and Jerusalem (xi. 30, xii. 25) we next get a glimpse of Barnabas as still chief among the spiritual leaders of the Antiochene Church, and as called by the Spirit, along with Saul, to initiate the wider mission of the Gospel, outside Syria even, in regions beyond (xiii. 2, 4). He led the way to his native Cyprus; but in the crucial struggle with the magician Bar-Jesus, in the presence of the governor of the island (xiii. 7 ff.), Saul seems to have come so decisively to the front, that henceforth, for the author of Acts he takes the lead, and Barnabas appears as his colleague (see xiii. 13, "Paul and his company," and note the turning back of Mark, the kinsman of Barnabas). The fact that at Lystra the natives styled Barnabas, Zeus, and Paul, Hermes, while suggesting that Barnabas was the man of nobler mien, proves that Paul was the chief speaker (xiv. 12); and the notices in the Pauline epistles fully bear out the view that "the gospel of the Gentiles" which they preached was in conception Paul's (Gal. ii. 1-9). Indeed, Barnabas's vacillation at Antioch, as recorded in Gal. ii. 11 ff. (whether it preceded or followed their mission in Acts xiii.-xiv.), shows that, while gifted with true intuitions, he was not strong in thinking out his position to all its issues on principle, and that it was here that Paul was so immensely his superior. But what Barnabas did see with full reasoned conviction, he was staunch in upholding; thus he upheld the general cause of Gentile freedom from the obligation of circumcision (as distinct from perfect religious equality with Jewish believers) at the Jerusalem conference (Acts xv.). With this stand for principle, however, his main work, as a great link in the transition of the Gospel from its Jewish to its universal mission, reached its climax; and Acts transfers its attention wholly to Paul, after explaining how their roads parted under rather painful circumstances (xv.

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When Barnabas sails away with Mark to resume work in Cyprus, the mists of history hide him from our sight. Only now and again do we catch fugitive and increasingly doubtful glimpses of him and his work. We learn from 1 Cor. ix. 6 that he adhered to Paul's principle of self-support in his mission work, and from Col. iv. 10 that his name was well known and respected at Colossae about A.D. 60. Tradition, which early regards him as one of the seventy (Clem. Alex.), carries him, plausibly enough, to Alexandria (*Clem. Hom.* i. 8, ii. 4; cf. the ascription to him of the Alexandrine *Epistle of Barnabas*). But the evidence for his having visited Rome (later tradition says also Milan) is stronger because more varied (*Clem. Recog.* i. 7, cf. *Hom.* i. 7; the early *Actus Petri Vercellenses*; and the late Cypriot *Encomium*), especially if we might trust the Western ascription to him of the epistle to the Hebrews, which begins with Tertullian (*De Pud.* 20). But this may itself be mere inference from its self-description (xiii. 22), as a "word of exhortation," to the "son of exhortation" (Acts iv. 36) as its author. The legend of his missionary labours in Cyprus,

including martyrdom at Salamis, is quite late and untrustworthy. The date of his death is uncertain, but he was probably no longer living when Acts was written (*c.* A.D. 75-80).

His was essentially a mediating role. He filled a position intermediate between Jewish and Pauline Christianity—one characteristic of Christian Hellenists generally. Hence he is spoken of with respect in the Clementines; while Paul, as a radical in relation to the Law, is discountenanced. If we could confidently credit him with the authorship of the epistle to the Hebrews, we could conceive his theological standpoint more exactly. But, in any case, the Barnabas of history was a greater man than the Barnabas of modern tradition.

See W. Cunningham, *Epistle of Barnabas*, pp. xlvii.-lxii.; O. Braunsberger, *Der Apostel Barnabas*, sein Leben ... (Mainz, 1876); articles s.v. in Ency. Biblica and Hastings's Dictionary of the Bible.

The Epistle of Barnabas is one of the apocryphal books of the New Testament. At the end of the Codex Sinaiticus of the 4th century, as a sort of appendix to the New Testament, there stands an "Epistle of Barnabas." Here it is followed by the Shepherd of Hermas, while in an 11th-century MS., which contains also the Didachē, it is followed by two writings which themselves form an appendix to the New Testament in the Codex Alexandrinus. This means that it once enjoyed quasi-canonical authority, a fact amply borne out by what Eusebius (H. E. iii. 25) says as to its standing in the ancient Church. It was at Alexandria that its authority was greatest. Clement comments on it, as on the canonical scriptures, in his Hypotyposes; Origen cites it in the same spirit as scripture (C. Celsum, i. 63, De Princ. iii. 2, 4, 7). Clement, too, ascribes it to "the apostle" or "the prophet" Barnabas (Strom. ii. 6, 31, cf. ii. 20, 116), with explicit reference to Paul's fellowapostle. Internal evidence makes this ascription impossible, nor does the epistle itself lay any claim to such authorship. Lightfoot, indeed, suggests that its author was "some unknown namesake" of the famous Barnabas: but it is simpler to suppose that it was fathered upon the latter by the Alexandrian Church, ready to believe that so favourite a writing was of apostolic origin.

"That Alexandria, the place of its earliest reception, was also the place of its birth, is borne out by the internal evidence of style and interpretation, which is Alexandrian throughout" (Lightfoot). The picture, too, which it gives of the danger lest the Christianity of its readers should be unduly Judaic in feeling and practice, suits well the experiences of a writer living in Alexandria, where Judaism was immensely strong. Further, he shows an "astonishing familiarity with the Jewish rites," in the opinion of a modern Jew (Kohler in the Jewish Encycl.); so much so, that the latter agrees with another Jewish scholar in saying that "the writer seems to have been a converted Jew, whose fanatic zeal rendered him a bitter opponent of Judaism within the Christian Church." These opinions must overrule the view of some Christian scholars that the writer often blunders in Jewish matters, the fact being that his knowledge is derived from the Judaism of Alexandria [1] rather than Palestine. But we need not therefore regard the author as of Jewish birth. It is enough, and more in keeping with the thought as a whole, to regard him as having been in close contact with Judaism, possibly as a proselyte. He now uses his knowledge to warn his readers, with intense passion, against all compromise between Judaism and the Gospel. In this he goes so far as to deny any historical connexion between the two, maintaining with all the devices of an extravagant allegorism, including the Rabbinic Gematria based on the numerical values of letters (ix. 7 f.), that the Law and Prophecy, as meant by God, had never been given to Israel as a people. The Divine oracles had ever pointed to the Christian Covenant, and had been so understood by the men of God in Israel, whereas the apostate people had turned aside to keep the ceremonial letter of the Law at the instigation of an evil angel (ix. 4). In this way he takes in succession the typical Jewish institutions—Circumcision, Foods, Ablutions, Covenant, Sabbath, Temple—showing their spiritual counterpart in the New People and its ordinances, and that the Cross was prefigured from the first. Such insight (gnosis) into the reality of the case he regards as the natural issue of Christian faith; and it is his main object to help his readers to attain such spirituality—the more so that, by similar insight applied to the signs of the times, he knows and can show that the end of the present age is imminent (i. 5, 7-iv.). The burden of his epistle, then, is, "Let us become spiritual, a perfect temple unto God" (iv. 11); and that not only by theoretic insight, but also by practical wisdom of life. In order to enforce this moral, he passes to "another sort of *gnosis* and instruction" (xviii. i), viz. the precepts of the "Two Ways," cited in a slightly different form from that found in the first part of the Teaching of the Apostles. The modifications, however, are all in a more spiritual direction, in keeping with the genuinely evangelic spirit which underlies and pervades even the allegorical ingenuities of the epistle.

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Its opening shows it to have been addressed to a Church, or rather a group of Churches, recently visited by the writer, who, while not wishing to write as an authoritative "teacher" so much as one who has come to love them as a friend (i. 8, cf. ix. 9), yet belongs to the class of "teachers" with a recognized spiritual gift (*charisma*), referred to *e.g.* in the *Didachē*. He evidently feels in a position to give his *gnosis* with some claim to a deferential hearing. This being so, the epistle was probably written, not to Alexandria, but rather by a "teacher" of the Alexandrine Church to some body of Christians in Lower Egypt among whom he had recently been visiting. This would explain the absence of specific address, so that it appears as in form a "general epistle," as Origen styles it. Its date has been much debated. But Lightfoot's reading of the apocalyptic passage in ch. iv.—with a slight modification suggested by Sir W. M. Ramsay—is really conclusive for the reign of Vespasian (A.D. 70-79). The main counter-view, in favour of a date about A.D. 130, can give no natural account of this passage, while it misconstrues the reference in ch. xvi. to the building of the spiritual temple, the Christian Church. Thus this epistle is the earliest of the Apostolic Fathers, and as such of special interest. Its central problem, the relation of Judaism and

Christianity—of the Old and the New forms of a Covenant which, as Divine, must in a sense abide the same—was one which gave the early Church much trouble; nor, in absence of a due theory of the education of the race by gradual development, was it able to solve it satisfactorily.

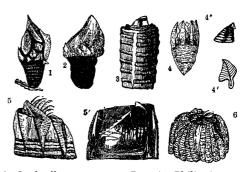
LITERATURE.—Besides collected editions of the Apostolic Fathers, see O. Braunsberger, Der Apostel Barnabas, ... u. der ihm beigelegte Brief (Mainz, 1876); W. Cunningham, Epistle of Barnabas (1877); sections in J. Donaldson, The Apostolic Fathers; E. Reuss, Théologie chrétienne, vol. ii., and in M. von Engelhardt, Das Christenthum Justins des Martyrers; and Lightfoot's fragmentary essay in his Clement of Rome, ii. 503-512. See also Apocryphal Literature, section "New Testament."

Gospel of Barnabas.—We read in antiquity, e.g. in the Decretum Gelasii, of an apocryphal Gospel of Barnabas (see Apocryphal Literature), but we have no knowledge of its contents. There exists, however, in a single MS. in Italian a longish gospel with this title, written from a Mahommedan standpoint, but probably embodying materials partly Gnostic in character and origin. The Italian MS. was found by the Deist, John Toland, in a private collection at Amsterdam (see his Nazarenus, 1718); subsequently it came into the possession of Prince Eugene of Savoy, and finally was obtained with Eugene's library by the imperial library at Vienna. It has been edited, with an English translation (1907) by (Rev.) Lonsdale and Laura Ragg, who hold that it was the work of a Christian renegade to Mahommedanism about the 13th-16th century. See also preliminary notice in the Journal of Theol. Studies, vi. 424 ff. The old view held by Toland and others that the Italian was a translation from the Arabic is demonstrably wrong. The Arabic marginal notes are apparently partly pious ejaculations, partly notes for the aid of Arabic students. The work is highly imaginative and often grotesque, but it is pervaded by an unusually high ethical enthusiasm.

(J. V. B.)

[1] His reference to the wide prevalence of circumcision beyond Israel (ix. 6) is perhaps simply an exaggeration, more or less conscious.

BARNACLE, a name applied to Crustacea of the division Cirripedia or Thyrostraca. Originally, the name was given to the stalked barnacles (Lepadidae of C. Darwin), which attach themselves in great numbers to drift-wood and other objects floating in the sea and are one of the chief agents in the fouling of ships' bottoms during long voyages. The sessile barnacles (Balanidae of Darwin) or "acorn-shells" are found in myriads, encrusting the rocks between tide-marks on all coasts. One of the most extraordinary and persistent myths of medieval natural history, dating back to the 12th century at least, was the cause of transferring to these 1. Scalpellum rostratum, Darwin, Philippine organisms the name of the barnack or bernacle goose Islands. (Bernicla branta). This bird is a winter visitor to 2. Pollicipes cornucopiae, Leach, European Britain, and its Arctic nesting-places being then unknown, it was fabled to originate within the shell-like fruit of a tree growing by the sea-shore. In some variants of the story this shell is said to grow as a kind of mushroom on rotting timber in the sea, and is obviously one of the barnacles of the genus Lepas. 5' Section of Balanus, Linn. Even after the scientific study of zoology had replaced 6. Coronula diadema, Linn., attached to whales. the fabulous tales of medieval writers, it was a long



- 3. Tubicinella trachealis, Shaw, attached to
- 4. Acasta sulcata, Lamk., in sponges, New South Wales; (4'), tergum; (4"), scutum.
- 5. Balanus tintinnabulum, Linn., Atlantic.

time before the true affinities of the barnacles were appreciated, and they were at first classed with the Mollusca, some of which they closely resemble in external appearance. It was not till Vaughan Thompson demonstrated, in 1830, their development from a free-swimming and typically Crustacean larva that it came to be recognized that, in Huxley's graphic phrase, "a barnacle may be said to be a Crustacean fixed by its head and kicking the food into its mouth with its legs." For a systematic account of the barnacles and their allies, see the article THYROSTRACA.

(W. T. CA.)

BARNARD, LADY ANNE (1750-1825), author of the ballad "Auld Robin Gray," the eldest daughter of James Lindsay, 5th earl of Balcarres, was born at Balcarres House, Fife, on the 12th of December 1750. She was married in 1793 to Andrew Barnard, a son of the bishop of Limerick, for whom she obtained from Henry Dundas (1st Viscount Melville) an appointment as colonial secretary at the Cape of Good Hope. Thither the Barnards went in March 1797, Lady Anne remaining at the Cape until January 1802. A remarkable series of letters written by Lady Anne thence to Dundas, then secretary for war and the colonies, was published in 1901 under the title South Africa a Century Ago. In 1806, on the reconquest of the Cape by the British, Barnard was reappointed colonial secretary, but Lady Anne did not accompany him thither, where he died in 1807. The rest of her life was passed in London, where she died on the 6th of May 1825. "Auld Robin Gray" was written by her in 1772, to music by the Rev. William Leeves (1748-1828), as he admitted in 1812. It was published anonymously in 1783, Lady Anne only acknowledging the authorship of the words two years before her death in a letter to Sir Walter Scott, who subsequently edited it for the Bannatyne Club with two continuations.

See the memoir by W. H. Wilkins, together with the original text of "Auld Robin Gray," prefixed to *South Africa a Century Ago*.

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BARNARD, FREDERICK AUGUSTUS PORTER (1809-1889), American scientist and educationalist, was born in Sheffield, Massachusetts, on the 5th of May 1809. In 1828 he graduated, second on the honour list, at Yale. He was then in turn a tutor at Yale, a teacher (1831-1832) in the American Asylum for the Deaf and Dumb at Hartford, Connecticut, and a teacher (1832-1838) in the New York Institute for the Instruction of the Deaf and Dumb. From 1838 to 1848 he was professor of mathematics and natural philosophy, and from 1848 to 1854 was professor of chemistry and natural history in the University of Alabama, for two years, also, filling the chair of English literature. In 1854 he was ordained as deacon in the Protestant Episcopal Church. In the same year he became professor of mathematics and natural philosophy in the University of Mississippi, of which institution he was chancellor from 1856 until the outbreak of the Civil War, when, his sympathies being with the North, he resigned and went to Washington. There for some time he was in charge of the map and chart department of the United States Coast Survey. In 1864 he became the tenth president of Columbia College (now Columbia University) in New York City, which position he held until the year before his death, his service thus being longer than that of any of his predecessors. During this period the growth of the college was rapid; new departments were established; the elective system was greatly extended; more adequate provision was made for graduate study and original research, and the enrolment was increased from about 150 to more than 1000 students. Barnard strove to have educational privileges extended by the university to women as well as to men, and Barnard College, for women (see Columbia University), established immediately after his death, was named in his honour. He died in New York City on the 27th of April 1889. Barnard was a versatile man, of catholic training, a classical and English scholar, a mathematician, a physicist, and a chemist, a good public speaker, and a vigorous but somewhat prolix writer on various subjects, his annual reports to the Board of Trustees of Columbia being particularly valuable as discussions of educational problems. Besides being the editor-in-chief, in 1872, of Johnson's Universal Cyclopaedia, he published a Treatise on Arithmetic (1830); an Analytical Grammar with Symbolic Illustration (1836); Letters on Collegiate Government (1855); and Recent Progress in Science (1869).

See John Fulton's Memoirs of Frederick A. P. Barnard (New York, 1896).

BARNARD, GEORGE GREY (1863-), American sculptor, was born at Bellefonte, Pennsylvania, on the 24th of May 1863. He first studied at the Art Institute, Chicago, and in 1883-1887 worked in P. T. Cavelier's *atelier* at Paris. He lived in Paris for twelve years, returning to America in 1896; and with his first exhibit at the Salon of 1894 he scored a great success. His principal works include, "The Boy" (1885); "Cain" (1886), later destroyed; "Brotherly Love," sometimes called "Two Friends" (1887); the allegorical "Two Natures" (1894, in the Metropolitan Museum, New York City); "The Hewer" (1902, at Cairo, Illinois); "Great God Pan" (in Central Park, New York City); the "Rose Maiden"; the simple and graceful "Maidenhood"; and sculptural decorations for the new Capitol building for the state of Pennsylvania at Harrisburg.

BARNARD, HENRY (1811-1900), American educationalist, was born in Hartford, Connecticut, on the 24th of January 1811. He graduated at Yale in 1830, and in 1835 was admitted to the Connecticut bar. In 1837-1839 he was a member of the Connecticut legislature, effecting in 1838 the passage of a bill, framed and introduced by himself, which provided for "the better supervision of the common schools" and established a board of "commissioners of common schools" in the state. Of this board he was the secretary from 1838 till its abolition in 1842, and during this time worked indefatigably to reorganize and reform the common school system of the state, thus earning a national reputation as an educational reformer. In 1843 he was appointed by the governor of Rhode Island agent to examine the public schools of the state, and recommended improvements; and his work resulted in the reorganization of the school system two years later. From 1845 to 1849 he was the first commissioner of public schools in the state, and his administration was marked by a decided step in educational progress. Returning to Connecticut, he was, from 1851 to 1855, "superintendent of common schools," and principal of the State Normal School at New Britain, Conn. From 1859 to 1860 he was chancellor of the University of Wisconsin and agent of the board of regents of the normal school fund; in 1866 he was president of St John's College, Annapolis, Maryland; and from 1867 to 1870 he was the first United States commissioner of education, and in this position he laid the foundation for the subsequent useful work of the Bureau of Education. His chief service to the cause of education, however, was rendered as the editor, from 1855 to 1881, of the American Journal of Education, the thirty-one volumes of which are a veritable encyclopaedia of education, one of the most valuable compendiums of information on the subject ever brought together through the agency of any one man. He also edited from 1838 to 1842, and again from 1851 to 1854, the Connecticut Common School Journal, and from 1846 to 1849 the Journal of the Rhode Island Institute of Instruction. He died at Hartford, Conn., on the 5th of July 1900. Among American educational reformers, Barnard is entitled to rank next to Horace Mann of Massachusetts.

See a biographical sketch by A. D. Mayo in the *Report of the Commissioner of Education for* 1896-1897 (Washington, 1898), and W. S. Monroe's *Educational Labours of Henry Barnard* (Syracuse, 1893).

BARNARD, JOHN, English musician, was a minor canon of St Paul's in the reign of Charles I. He was the first to publish a collection of English cathedral music. It contains some of the finest 16th-century masterpieces, ranging from the "faux-bourdon" style of Tallis's Pieces and

Responses to the most developed types of full anthem. The text, however, is not trustworthy.

BARNARD CASTLE, a market-town in the Barnard Castle parliamentary division of Durham, England, 17 m. W. of Darlington by a branch of the North Eastern railway. Pop. of urban district (1901) 4421. It is beautifully situated on the steep left bank of the Tees. A noteworthy building in the town is the octagonal town-hall, dating from 1747. There are a few picturesque old houses, and a fragment of an Augustinian convent. St Mary's church, in a variety of styles from Norman onward, contains some curious monuments; but the building of chief interest is the castle, which gives the town its name, and is the principal scene of Sir Walter Scott's *Rokeby*. The remains extend over a space of more than six acres. A remarkable building known as the Bowes' Mansion and Museum, bequeathed in 1874 to the town by a descendant of Sir George Bowes, contains a valuable collection of works of art. In the vicinity of the town are Egglestone Abbey, beautifully situated on the Yorkshire bank of the river, Rokeby Park on the same bank, at the confluence of the Greta, and the massive 14th century castle of Raby to the north-east. The principal manufacture is shoe-thread. The corn-market is important.

As part of the lordship of Gainford, Barnard Castle is said to have been granted by William Rufus to Guy Baliol Bernard, son of Guy Baliol, who built the castle, and called it after himself. Castle Bernard. To the men of the town which grew up outside the castle walls he gave, about the middle of the 12th century, a charter making them burgesses and granting them the same privileges as the town of Richmond in Yorkshire. This charter was confirmed by Bernard Baliol, son of the above Bernard. Other confirmation charters were granted to the town by Hugh, John, and Alexander Baliol. The castle and lordship remained in the hands of the Baliols until John Baliol, king of Scotland, forfeited them with his other English estates in 1296. Barnard Castle was then seized by Anthony, bishop of Durham, as being within his palatinate of Durham. Edward I., however, denied the bishop's rights and granted the castle and town to Guy Beauchamp, earl of Warwick, whose descendants continued to hold them until they passed to the crown by the marriage of Anne Nevill with Richard III., then duke of Gloucester. In 1630 Barnard Castle was sold to Sir Henry Vane, and in the same year the castle is said to have been unroofed and dismantled for the sake of the materials of which it was built. Tanning leather was formerly one of the chief industries of the town. In 1614 an act for "knights and burgesses to have place in parliament for the county palatine and city of Durham and borough of Barnard Castle" was brought into the House of Commons, but when the act was finally passed for the county and city of Durham, Barnard Castle was not included.

[v.03 p.0411]

BARNARDO, THOMAS JOHN (1845-1905), English philanthropist, and founder and director of homes for destitute children, was born at Dublin, Ireland, in 1845. His father was of Spanish origin, his mother being an Englishwoman. With the intention of qualifying for medical missionary work in China, he studied medicine at the London hospital, and later at Paris and Edinburgh, where he became a fellow of the Royal College of Surgeons. His medical work in the east end of London during the epidemic of cholera in 1865 first drew his attention to the great numbers of homeless and destitute children in the cities of England. Encouraged by the support of the seventh earl of Shaftesbury and the first Earl Cairns, he gave up his early ambition of foreign missionary labour, and began what was to prove his life's work. The first of the "Dr Barnardo's Homes" was opened in 1867 in Stepney Causeway, London, where are still the headquarters of the institution. From that time the work steadily increased until, at the time of the founder's death, in 1905, there were established 112 district "Homes," besides mission branches, throughout the United Kingdom. The object for which these institutions were started was to search for and to receive waifs and strays, to feed, clothe, educate, and, where possible, to give an industrial training suitable to each child. The principle adopted has been that of free and immediate admission; there are no restrictions of age or sex, religion or nationality; the physically robust and the incurably diseased are alike received, the one necessary qualification being destitution. The system under which the institution is carried on is broadly as follows:—the infants and younger girls and boys are chiefly "boarded out" in rural districts; girls above fourteen years of age are sent to the industrial training homes, to be taught useful domestic occupations; boys above seventeen years of age are first tested in labour homes and then placed in employment at home, sent to sea or emigrated; boys of between thirteen and seventeen years of age are trained for the various trades for which they may be mentally or physically fitted. Besides the various branches necessary for the foregoing work, there are also, among others, the following institutions:—a rescue home for girls in danger, a convalescent seaside home, and a hospital for sick waifs. In 1872 was founded the girls' village home at Barkingside, near Ilford, with its own church and sanatorium, and between sixty and seventy cottage homes, forming a real "garden city"; and there Barnardo himself was buried. In 1901, through the generosity of Mr E. H. Watts, a naval school was started at North Elmham, near Norwich, to which boys are drafted from the homes to be trained for the navy and the mercantile marine. Perhaps the most useful of all the varied work instituted by Barnardo is the emigration system, by which means thousands of boys and girls have been sent to British colonies, chiefly to Canada, where there are distributing centres at Toronto and Winnipeg, and an industrial farm of some 8000 acres near Russell in Manitoba. The fact that in Canada less than 2% of the children sent out proved failures confirmed Barnardo's conviction that "if the children of the slums can be removed from their surroundings early enough, and can be kept sufficiently long under training, heredity counts for little, environment for almost everything." In 1899 the various institutions and organizations were legally incorporated under the title of "The National Association for the reclamation of Destitute Waif Children," but the institution has always been familiarly known as "Dr Barnardo's Homes." Barnardo laid great stress on the religious teaching of the children under his care. Each child is brought up under the influence and teaching of the denomination of the parents. The

homes are divided into two sections for religious teaching, Church of England and Nonconformists; children of Jewish and Roman Catholic parentage are, where possible, handed over to the care of the Jewish Board of Guardians in London, and to Roman Catholic institutions, respectively. From the foundation of the homes in 1867 to the date of Barnardo's death, nearly 60,000 children had been rescued, trained and placed out in life. Barnardo died of angina pectoris in London on the 19th of September 1905. A national memorial was instituted to form a fund of £250,000 to relieve the various institutions of all financial liability and to place the entire work on a permanent basis. Dr William Baker, formerly the chairman of the council, was selected to succeed the founder of the homes as director. Barnardo was the author of many books dealing with the charitable work to which he devoted his life.

His biography (1907) was written by his wife (the daughter of Mr William Elmslie) and J. Marchant.

BARNAUL, a town of Asiatic Russia, government of Tomsk, standing in a plain bounded by offshoots of the Altai Mountains, and on the Barnaulka river, at its confluence with the Ob, in lat. 53° 20′ N. and long. 83° 46′ E., 220 m. S. of Tomsk. It is the capital of the Altai mining districts, and besides smelting furnaces possesses glassworks, a bell-foundry and a mint. It has also a meteorological observatory, established in 1841, a mining school and a museum with a rich collection of mineral and zoological specimens. Barnaul was founded in 1730 by A. Demidov, to whose memory a monument has been erected. Pop. (1900) 29,850.

BARNAVE, ANTOINE PIERRE JOSEPH MARIE (1761-1793), one of the greatest orators of the first French Revolution, was born at Grenoble in Dauphiné, on the 22nd of October 1761. He was of a Protestant family. His father was an advocate at the parlement of Grenoble, and his mother was a woman of high birth, superior ability and noble character. He was educated by his mother because, being a Protestant, he could not attend school, and he grew up at once thoughtful and passionate, studious and social, handsome in person and graceful in manners. He was brought up to the law, and at the age of twenty-two made himself favourably known by a discourse pronounced before the local parlement on the division of political powers. Dauphiné was one of the first of the provinces to feel the excitement of the coming revolution; and Barnave was foremost to give voice to the general feeling, in a pamphlet entitled *Esprit des édits enregistrés* militairement le 20 mai 1788. He was immediately elected deputy, with his father, to the states of Dauphiné, and took a prominent part in their debates. A few months later he was transferred to a wider field of action. The states-general were convoked at Versailles for the 5th of May 1789, and Barnave was chosen deputy of the tiers état for his native province. He soon made an impression on the Assembly, became the friend of most of the leaders of the popular party, and formed with Adrien Duport and Alexandre Lameth (q.v.) the group known during the Constituent Assembly as "the triumvirate." He took part in the conference on the claims of the three orders, drew up the first address to the king, and supported the proposal of Sieyès that the Assembly should declare itself National. Until 1791 he was one of the principal members of the club known later as the Jacobins, of which he drew up the manifesto and first rules (see Jacobins). Though a passionate lover of liberty, he hoped to secure the freedom of France and her monarchy at the same time. But he was almost unawares borne away by the mighty currents of the time, and he took part in the attacks on the monarchy, on the clergy, on church property, and on the provincial parlements. With the one exception of Mirabeau, Barnave was the most powerful orator of the Assembly. On several occasions he stood in opposition to Mirabeau. After the fall of the Bastille he wished to save the throne. He advocated the suspensory veto, and the establishment of trial by jury in civil causes, but voted with the Left against the system of two chambers. His conflict with Mirabeau on the question of assigning to the king the right to make peace or war (from the 16th to the 23rd of May 1791) was one of the most striking scenes in the Assembly. In August 1790, after a vehement debate, he fought a duel with J. A. M. de Cazalès, in which the latter was slightly wounded. About the close of October 1790 Barnave was called to the presidency of the Assembly. On the death of Mirabeau a few months later, Barnave paid a high tribute to his worth and public services, designating him the Shakespeare of oratory. On the arrest of the king and the royal family at Varennes, while attempting to escape from France, Barnave was one of the three appointed to conduct them back to Paris. On the journey he was deeply affected by the mournful fate of Marie-Antoinette, and resolved to do what he could to alleviate their sufferings. In one of his most powerful speeches he maintained the inviolability of the king's person. His public career came to an end with the close of the Constituent Assembly, and he returned to Grenoble at the beginning of 1792. His sympathy and relations with the royal family, to whom he had submitted a plan for a counter-revolution, and his desire to check the downward progress of the Revolution, brought on him suspicion of treason. Denounced (15th of August 1792) in the Legislative Assembly, he was arrested and imprisoned for ten months at Grenoble, then transferred to Fort Barraux, and in November 1793 to Paris. The nobility of his character was proof against the assaults of suffering. "Better to suffer and to die," he said, "than lose one shade of my moral and political character." On the 28th of November he appeared before the Revolutionary Tribunal. He was condemned on the evidence of papers found at the Tuileries and executed the next day, with Duport-Dutertre.

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Barnave's Œuvres posthumes were published in 1842 by Bérenger (de la Drôme) in 4 vols. See F. A. Aulard, Les Orateurs de l'assemblée constituante (Paris, 1882).

BARNBY, SIR JOSEPH (1838-1896), English musical composer and conductor, son of Thomas Barnby, an organist, was born at York on the 12th of August 1838. He was a chorister at York minster from the age of seven, was educated at the Royal Academy of Music under Cipriani

Potter and Charles Lucas, and was appointed in 1862 organist of St Andrew's, Wells Street, London, where he raised the services to a high degree of excellence. He was conductor of "Barnby's Choir" from 1864, and in 1871 was appointed, in succession to Gounod, conductor of the Albert Hall Choral Society, a post he held till his death. In 1875 he was precentor and director of music at Eton, and in 1892 became principal of the Guildhall School of Music, receiving the honour of knighthood in July of that year. His works include an oratorio Rebekah, Ps. xcvii., many services and anthems, and two hundred and forty-six hymn-tunes (published in 1897 in one volume), as well as some part-songs (among them the popular "Sweet and Low"), and some pieces for the organ. As a conductor he possessed the qualities as well as the defects of the typical north-countryman; if he was wanting in the higher kind of imagination or ideality, he infused into those who sang under him something of his own rectitude and precision. He was largely instrumental in stimulating the love for Gounod's sacred music among the less educated part of the London public, although he displayed little practical sympathy with opera. On the other hand, he organized a remarkable concert performance of Parsifal at the Albert Hall in London in 1884. He conducted the Cardiff Festivals of 1892 and 1895. He died in London on the 28th of January 1896, and after a special service in St Paul's cathedral was buried in Norwood Cemetery.

BARNES, ALBERT (1798-1870), American theologian, was born at Rome, New York, on the 1st of December 1798. He graduated at Hamilton College, Clinton, N.Y., in 1820, and at the Princeton Theological Seminary in 1823, was ordained as a Presbyterian minister by the presbytery of Elizabethtown, New Jersey, in 1825, and was the pastor successively of the Presbyterian Church in Morristown, New Jersey (1825-1830) and of the First Presbyterian Church of Philadelphia (1830-1867). He held a prominent place in the New School branch of the Presbyterians, to which he adhered on the division of the denomination in 1837; he had been tried (but not convicted) for heresy in 1836, the charge being particularly against the views expressed by him in Notes on Romans (1835) of the imputation of the sin of Adam, original sin and the atonement; the bitterness stirred up by this trial contributed towards widening the breach between the conservative and the progressive elements in the church. He was an eloquent preacher, but his reputation rests chiefly on his expository works, which are said to have had a larger circulation both in Europe and America than any others of their class. Of the well-known Notes on the New Testament it is said that more than a million volumes had been issued by 1870. The *Notes* on Job, the Psalms, Isaiah and Daniel, found scarcely less acceptance. Displaying no original critical power, their chief merit lies in the fact that they bring in a popular (but not always accurate) form the results of the criticism of others within the reach of general readers. Barnes was the author of several other works of a practical and devotional kind, and a collection of his *Theological Works* was published in Philadelphia in 1875. He died in Philadelphia on the 24th of December 1870.

BARNES, BARNABE (1569?-1609), English poet, fourth son of Dr Richard Barnes, bishop of Durham, was born in Yorkshire, perhaps at Stonegrave, a living of his father's, in 1568 or 1569. In 1586 he was entered at Brasenose College, Oxford, where Giovanni Florio was his servitor, and in 1591 went to France with the earl of Essex, who was then serving against the prince of Parma. On his return he published Parthenophil and Parthenophe, Sonnettes, Madrigals, Elegies and Odes (ent. on Stationers' Register 1593), dedicated to his "dearest friend," William Percy, who contributed a sonnet to the eulogies prefixed to a later work, Offices. Parthenophil was possibly printed for private circulation, and the copy in the duke of Devonshire's library is believed to be unique. Barnes was well acquainted with the work of contemporary French sonneteers, to whom he is largely indebted, and he borrows his title, apparently, from a Neapolitan writer of Latin verse, Hieronymus Angerianus. It is possible to outline a story from this series of love lyrics, but the incidents are slight, and in this case, as in other Elizabethan sonnet-cycles, it is difficult to dogmatize as to what is the expression of a real personal experience, and what is intellectual exercise in imitation of Petrarch. Parthenophil abounds in passages of great freshness and beauty, although its elaborate conceits are sometimes overingenious and strained. Barnes took the part of Gabriel Harvey and even experimented in classical metres. This partisanship is sufficient to account for the abuse of Thomas Nashe, who accused him, apparently on no proof at all, of stealing a nobleman's chain at Windsor, and of other things. Barnes's second work, A Divine Centurie of Spirituall Sonnetts, appeared in 1595. He also wrote two plays:-The Divil's Charter (1607), a tragedy dealing with the life of Pope Alexander VI., which was played before the king; and The Battle of Evesham (or Hexham), of which the MS., traced to the beginning of the 18th century, is lost. In 1606 he dedicated to King James Offices enabling privat Persons for the speciall service of all good Princes and Policies, a prose treatise containing, among other things, descriptions of Queen Elizabeth and of the earl of Essex. Barnes was buried at Durham in December 1609.

His *Parthenophil* and *Spirituall Sonnetts* were edited by Dr A. B. Grosart in a limited issue in 1875; *Parthenophil* was included by Prof. E. Arber in vol. v. of *An English Garner*; see also the new edition of *An English Garner* (*Elizabethan Sonnets*, ed. S. Lee, 1904, pp. lxxv. et seq.). Professor E. Dowden contributed a sympathetic criticism of Barnes to *The Academy* of Sept. 2, 1876.

BARNES, SIR EDWARD (1776-1838), British soldier, entered the 47th regiment in 1792, and quickly rose to field rank. He was promoted lieutenant-colonel in 1807, and colonel in 1810, and two years later went to the Peninsula to serve on Wellington's staff. His services in this capacity gained him further promotion, and as a major-general he led a brigade at Vittoria and in the Pyrenean battles. He had the cross and three clasps for his Peninsula service. As adjutant-general

he served in the campaign of 1815 and was wounded at Waterloo. Already a K.C.B., he now received the Austrian order of Maria Theresa, and the Russian order of St Anne. In 1819 began his connexion with Ceylon, of which island he was governor from 1824 to 1831. He directed the construction of the great military road between Colombo and Kandy, and of many other lines of communication, made the first census of the population, and introduced coffee cultivation on the West Indian system (1824). In 1831 he received the G.C.B., and from 1831 to 1853 he was commander-in-chief in India, with the local rank of general. On his return home, after two unsuccessful attempts to secure the seat, he became M.P. for Sudbury in 1837, but he died in the following year. Sir Edward Barnes' portrait was painted, for Ceylon, by John Wood, and a memorial statue was erected in Colombo.

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BARNES, JOSHUA (1654-1712), English scholar, was born in London on the 10th of January 1654. Educated at Christ's Hospital and at Emmanuel College, Cambridge, he was in 1695 chosen regius professor of Greek, a language which he wrote and spoke with the utmost facility. One of his first publications was entitled *Gerania; a New Discovery of a Little Sort of People, anciently discoursed of, called Pygmies* (1675), a whimsical sketch to which Swift's *Voyage to Lilliput* possibly owes something. Among his other works are a *History of that Most Victorious Monarch Edward III.* (1688), in which he introduces long and elaborate speeches into the narrative; editions of Euripides (1694) and of Homer (1711), also one of Anacreon (1705) which contains titles of Greek verses of his own which he hoped to publish. He died on the 3rd of August 1712, at Hemingford, near St Ives, Hunts.

BARNES, ROBERT (1495-1540), English reformer and martyr, born about 1495, was educated at Cambridge, where he was a member, and afterwards prior of the convent of Austin Friars, and graduated D.D. in 1523. He was apparently one of the Cambridge men who were wont to gather at the White Horse Tavern for Bible-reading and theological discussion early in the third decade of the 16th century. In 1526, he was brought before the vice-chancellor for preaching a heterodox sermon, and was subsequently examined by Wolsey and four other bishops. He was condemned to abjure or be burnt; and preferring the former alternative, was committed to the Fleet prison and afterwards to the Austin Friars in London. He escaped thence to Antwerp in 1528, and also visited Wittenberg, where he made Luther's acquaintance. He also came across Stephen Vaughan, an agent of Thomas Cromwell and an advanced reformer, who recommended him to Cromwell: "Look well," he wrote, "upon Dr Barnes' book. It is such a piece of work as I have not yet seen any like it. I think he shall seal it with his blood" (Letters and Papers of Henry VIII. v. 593). In 1531 Barnes returned to England, and became one of the chief intermediaries between the English government and Lutheran Germany. In 1535 he was sent to Germany, in the hope of inducing Lutheran divines to approve of Henry's divorce from Catherine of Aragon, and four years later he was employed in negotiations connected with Anne of Cleves's marriage. The policy was Cromwell's, but Henry VIII. had already in 1538 refused to adopt Lutheran theology, and the statute of Six Articles (1539), followed by the king's disgust with Anne of Cleves (1540), brought the agents of that policy to ruin. An attack upon Bishop Gardiner by Barnes in a sermon at St Paul's Cross was the signal for a bitter struggle between the Protestant and reactionary parties in Henry's council, which raged during the spring of 1540. Barnes was forced to apologize and recant; and Gardiner delivered a series of sermons at St Paul's Cross to counteract Barnes' invective. But a month or so later Cromwell was made earl of Essex, Gardiner's friend, Bishop Sampson, was sent to the Tower, and Barnes reverted to Lutheranism. It was a delusive victory. In July, Cromwell was attainted, Anne of Cleves was divorced and Barnes was burnt (30th July 1540). He also had an act of attainder passed against him, a somewhat novel distinction for a heretic, which illustrates the way in which Henry VIII. employed secular machinery for ecclesiastical purposes, and regarded heresy as an offence against the state rather than against the church. Barnes was one of six executed on the same day: two, William Jerome and Thomas Gerrard, were, like himself, burnt for heresy under the Six Articles; three, Thomas Abel, Richard Fetherstone and Edward Powell, were hanged for treason in denying the royal supremacy. Both Lutherans and Catholics on the continent were shocked. Luther published Barnes' confession with a preface of his own as Bekenntnis des Glaubens (1540), which is included in Walch's edition of Luther's Werke xxi. 186.

See Letters and Papers of Henry VIII. vols. iv.-xv. passim; Wriothesley's Chronicle; Foxe's Acts and Monuments, ed. G. Townsend Burnet's Hist. of the Ref., ed. Pocock; Dixon's Hist. of the Church; Gairdner's Church in the XVIth Century; Pollard's Henry VIII. and Cranmer; Herzog-Hauck, Realencyklopadie, 3rd ed.

(A. F. P.)

BARNES, THOMAS (1785-1841), British journalist, was born about 1785. Educated at Christ's Hospital and Pembroke College, Cambridge, he came to London and soon joined the famous literary circle of which Hunt, Lamb and Hazlitt were prominent members. Upon the retirement of Dr Stoddart in 1817 he was appointed editor of *The Times*, a position which he held until his death, when he was succeeded by Delane. Lord Lyndhurst gave expression to a very widely-held opinion when he described him as "the most powerful man in the country." He died on the 7th of May 1841.

BARNES, WILLIAM (1800-1886), the Dorsetshire poet, was born on the 22nd of February 1800, at Rushay, near Pentridge in Dorset, the son of John Barnes and Grace Scott, of the farmer class. He was a delicate child, in direct contrast to a strong race of forebears, and inherited from his mother a refined, retiring disposition and a love for books. He went to school at Sturminster Newton, where he was considered the clever boy of the school; and when a solicitor named

Dashwood applied to the master for a quick-witted boy to join him as pupil, Barnes was selected for the post. He worked with the village parson in his spare hours at classics and studied music under the organist. In 1818 he left Sturminster for the office of one Coombs at Dorchester, where he continued his evening education with another kindly clergyman. He also made great progress in the art of wood-engraving, and with the money he received for a series of blocks for a work called Walks about Dorchester, he printed and published his first book, Orra, a Lapland Tale, in 1822. In the same year he became engaged to Julia Miles, the daughter of an excise officer. In 1823 he took a school at Mere in Wiltshire, and four years later married and settled in Chantry House, a fine old Tudor mansion in that town. The school grew in numbers, and Barnes occupied all his spare time in assiduous study, reading during these years authors so diverse in character as Herodotus, Sallust, Ovid, Petrarch, Buffon and Burns. He also began to write poetry, and printed many of his verses in the Dorset County Chronicle. His chief studies, however, were philological; and in 1829 he published An Etymological Glossary of English Words of Foreign Derivation. In 1832 a strolling company of actors visited Mere, and Barnes wrote a farce, The Honest Thief, which they produced, and a comedy which was played at Wincanton. Barnes also wrote a number of educational books, such as *Elements of Perspective, Outlines of Geography*, and in 1833 first began his poems in the Dorsetshire dialect, among them the two ecloques "The 'Lotments" and "A Bit o' Sly Coorten," in the pages of the local paper. In 1835 he left Mere, and returned to Dorchester, where he started another school, removing in 1837 into larger quarters. In 1844 he published Poems of Rural Life in the Dorset Dialect. Three years later Barnes took holy orders, and was appointed to the cure of Whitcombe, 3 m. from Dorchester. He had been for some years upon the books of St John's College, Cambridge, and took the degree of B.D. in 1850. He resigned Whitcombe in 1852, finding the work too hard in connexion with his mastership; and in June of that year he sustained a severe bereavement by the death of his wife. Continuing his studies in the science of language, he published his Philological Grammar in 1854, drawing examples from more than sixty languages. For the copyright of this erudite work he received £5. The second series of dialect poems, Hwomely Rhymes, appeared in 1859 (2nd ed. 1863). Hwomely Rhymes contained some of his best-known pieces, and in the year of its publication he first began to give readings from his works. As their reputation grew he travelled all over the country, delighting large audiences with his quaint humour and natural pathos. In 1861 he was awarded a civil list pension of £70 a year, and in the next year published Tiw, the most striking of his philological studies, in which the Teutonic roots in the English language are discussed. Barnes had a horror of Latin forms in English, and would have substituted English compounds for many Latin forms in common use. In 1862 he broke up his school, and removed to the rectory of Winterborne Came, to which he was presented by his old friend, Captain Seymour Dawson Damer. Here he worked continuously at verse and prose, contributing largely to the magazines. A new series of Poems of Rural Life in the Dorset Dialect appeared in 1862, and he was persuaded in 1868 to publish a series of Poems of Rural Life in Common English, which was less successful than his dialect poems. These latter were collected into a single volume in 1879, and on the 7th of October 1886 Barnes died at Winterborne Came. His poetry is essentially English in character; no other writer has given quite so simple and sincere a picture of the homely life and labour of rural England. His work is full of humour and the clean, manly joy of life; and its rusticity is singularly allied to a literary sense and to high technical finish. He is indeed the Victorian Theocritus; and, as English country life is slowly swept away before the advance of the railway and the telegraph, he will be more and more read for his warm-hearted and fragrant record of rustic love and piety. His original and suggestive books on the English language, which are valuable in spite of their eccentricities, include:—Se Gefylsta: an Anglo-Saxon Delectus (1849); A

See *The Life of William Barnes, Poet and Philologist* (1887), by his daughter, Lucy E. Baxter, who is known as a writer on art by the pseudonym of Leader Scott; and a notice by Thomas Hardy in the *Athenaeum* (16th of October 1886).

Grammar and Glossary of the Dorset Dialect (1864); An Outline of English Speech-Craft (1878);

and A Glossary of the Dorset Dialect (Dorchester, 1886).

BARNET, a residential district in the mid or St Albans parliamentary division of Hertfordshire, England; 10 m. N. of London, served by the main line and branches of the Great Northern railway. The three chief divisions are as follows:—(1) Chipping or High Barnet, a market town and urban district (Barnet), pop. (1901) 7876. The second epithet designates its position on a hill, but the first is given it from the market granted to the abbots of St Albans to be kept there, by Henry II. Near the town, round a point marked by an obelisk, was fought in 1471 the decisive battle between the houses of York and Lancaster, in which the earl of Warwick fell and the Lancastrians were totally defeated. The town is on the Great North Road, on which it was formerly an important coaching station. A large annual horse and cattle fair is held. (2) East Barnet, 2 m. S.E. of Chipping Barnet, has an ancient parish church retaining Norman portions, though enlarged in modern times. Pop. of East Barnet Valley urban district, 10,094. (3) New Barnet lies 1 m. E. by S. from Chipping Barnet.

Friern Barnet, in the Enfield parliamentary division of Middlesex, lies 3 m. S. of Chipping Barnet. Pop. of urban district, 11,566. The prefix recalls the former lordship of the manor possessed by the friary of St John of Jerusalem in Clerkenwell, London. Friern Barnet adjoins Finchley on the north and Whetstone on the south, the whole district being residential.

BARNETT, JOHN (1802-1890), English musical composer, son of a Prussian named Bernhard Beer, who changed his name on settling in England as a jeweller, was born at Bedford, and at the age of eleven sang on the Lyceum stage in London. His good voice led to his being given a musical education, and he soon began writing songs and lighter pieces for the stage. In 1834 he

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published a collection of *Lyrical Illustrations of the Modern Poets*, His *Mountain Sylph*—with which his name is chiefly connected—received a warm welcome when produced at the Lyceum on August 25, 1834, as the first modern English opera: and it was followed by another opera *Fair Rosamund* in 1837, and by *Farinelli* in 1839. He had a large connexion as a singing-master at Cheltenham, and published *Systems and Singing-masters* (1842) and *School for the Voice* (1844). He died on the 16th of April 1890.

His nephew, John Francis Barnett (1837-), son of John's brother, Joseph Alfred, also a professor of music, carried on the traditions of the family as a composer and teacher. He obtained a queen's scholarship at the Royal Academy of Music, and developed into an accomplished pianist, visiting Germany to study in 1857 and playing at a Gewandhaus concert at Leipzig in 1860. He came into notice as a composer with his symphony in A minor (1864), and followed this with a number of compositions for orchestra, strings or pianoforte. His cantata *The Ancient Mariner* was brought out at Birmingham in 1867, and another, *Paradise and the Peri*, in 1870, both with great success. In 1873 his most important work, the oratorio *The Raising of Lazarus*, was written, and in 1876 produced at Hereford. Many other cantatas, pianoforte pieces, &c. were composed by him, and successfully brought out; and he took an active part as a professor in the work of the Guildhall School of Music and Royal College of Music.

BARNETT, SAMUEL AUGUSTUS (1844-), English clergyman and social reformer, was born at Bristol on the 8th of February 1844, the son of Francis Augustus Barnett, an iron manufacturer. After leaving Wadham College, Oxford, in 1866, he visited the United States. Next year he was ordained to the curacy of St Mary's, Bryanston Square, and took priest's orders in 1868. In 1872 he became vicar of St Jude's, Commercial Street, Whitechapel, and in the next year married Henrietta Octavia Rowland, who had been a co-worker with Miss Octavia Hill and was no less ardent a philanthropist than her husband. Mr and Mrs Barnett worked hard for the poor of their parish, opening evening schools for adults, providing them with music and reasonable entertainment, and serving on the board of guardians and on the managing committees of schools. Mr Barnett did much to discourage outdoor relief, as tending to the pauperization of the neighbourhood. At the same time the conditions of indoor relief were improved, and the various charities were co-ordinated, by co-operation with the Charity Organization Society and the parish board of guardians. In 1875 Arnold Toynbee paid a visit, the first of many, to Whitechapel, and Mr Barnett, who kept in constant touch with Oxford, formed in 1877 a small committee, over which he presided himself, to consider the organization of university extension in London, his chief assistants being Leonard Montefiore, a young Oxford man, and Frederick Rogers, a member of the vellum binders' trade union. The committee received influential support, and in October four courses of lectures, one by Dr S. R. Gardiner on English history, were given in Whitechapel. The Barnetts were also associated with the building of model dwellings, with the establishment of the children's country holiday fund and the annual loan exhibitions of fine art at the Whitechapel gallery. In 1884 an article by Mr Barnett in the Nineteenth Century discussed the question of university settlements. This resulted in July in the formation of the University Settlements Association, and when Toynbee Hall was built shortly afterwards Mr Barnett became its warden. He was a select preacher at Oxford in 1895-1897, and at Cambridge in 1900; he received a canonry in Bristol cathedral in 1893, but retained his wardenship of Toynbee Hall, while relinquishing the living of St Jude's. In June 1906 he was preferred to a canonry at Westminster, and when in December he resigned the wardenship of Toynbee Hall the position of president was created so that he might retain his connexion with the institution. Among Canon Barnett's works is Practicable Socialism (1888, 2nd ed. 1894), written in conjunction with his wife.

BARNFIELD, RICHARD (1574-1627), English poet, was born at Norbury, Staffordshire, and baptized on the 13th of June 1574. His obscure though close relationship with Shakespeare has long made him interesting to students and has attracted of late years further attention from the circumstance that important discoveries regarding his life have been made. Until recently nothing whatever was known about the facts of Barnfield's career, whose very existence had been doubted. It was, however, discovered by the late Dr A. B. Grosart that the poet was the son of Richard Barnfield (or Barnefield) and Maria Skrymsher, his wife, who were married in April 1572. They resided in the parish of Norbury, in Staffordshire, on the borders of Salop, where the poet was baptized on the 13th of June 1574. The mother died in giving birth to a daughter early in 1581, and her unmarried sister, Elizabeth Skrymsher, seems to have devoted herself to the care of the children. In November 1589 Barnfield matriculated at Brasenose College, Oxford, and took his degree in February 1592. He "performed the exercise for his master's gown," but seems to have left the university abruptly, without proceeding to the M.A. It is conjectured that he came up to London in 1593, and became acquainted with Watson, Drayton, and perhaps with Spenser. The death of Sir Philip Sidney had occurred while Barnfield was still a school-boy, but it seems to have strongly affected his imagination and to have inspired some of his earliest verses. In November 1594, in his twenty-first year, Barnfield published anonymously his first work, The Affectionate Shepherd, dedicated with familiar devotion to Penelope, Lady Rich. This was a sort of florid romance, in two books of six-line stanza, in the manner of Lodge and Shakespeare, dealing at large with "the complaint of Daphnis for the love of Ganymede." As the author expressly admitted later, it was an expansion or paraphrase of Virgil's second eclogue—

"Formosum pastor Corydon ardebat Alexin."

This poem of Barnfield's was the most extraordinary specimen hitherto produced in England of the licence introduced from Italy at the Renaissance. Although the poem was successful, it did not pass without censure from the moral point of view. Into the conventional outlines of *The*

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Affectionate Shepherd the young poet has poured all his fancy, all his epithets, and all his coloured touches of nature. If we are not repelled by the absurd subject, we have to admit that none of the immediate imitators of Venus and Adonis has equalled the juvenile Barnfield in the picturesqueness of his "fine ruff-footed doves," his "speckled flower call'd sops-in-wine," or his desire "by the bright glimmering of the starry light, to catch the long-bill'd woodcock." Two months later, in January 1595, Barnfield published his second volume, Cynthia, with certain Sonnets, and this time signed the preface, which was dedicated, in terms which imply close personal relations, to William Stanley, the new earl of Derby. This is a book of extreme interest; it exemplifies the earliest study both of Spenser and Shakespeare. "Cynthia" itself, a panegyric on Queen Elizabeth, is written in the Spenserian stanza, of which it is probably the earliest example extant outside The Faerie Queene. This is followed by a sequence of twenty sonnets, which have the extraordinary interest that, while preceding the publication of Shakespeare's sonnets by fourteen years, they are closer to them in manner than are any others of the Elizabethan age. They celebrate, with extravagant ardour, the charms of a young man whose initials seem to have been J. U. or J. V., and of whom nothing else seems known. These sonnets, which preceded even the Amoretti of Spenser, are of unusual merit as poetry, and would rank as high in quality as in date of publication if their subject-matter were not so preposterous. They show the influence of Drayton's Idea, which had appeared a few months before; in that collection also, it is to be observed, there had appeared amatory sonnets addressed to a young man. If editors would courageously alter the gender of the pronouns, several of Barnfield's glowing sonnets might take their place at once in our anthologies. Before the publication of his volume, however, he had repented of his heresies, and had become enamoured of a "lass" named Eliza (or Elizabeth), whom he celebrates with effusion in an "Ode." This is probably the lady whom he presently married, and as we find him a grandfather in 1626 it is unlikely that the wedding was long delayed. In 1598 Barnfield published his third volume, The Encomion of Lady Pecunia, a poem in praise of money, followed by a sort of continuation, in the same six-line stanza, called "The Complaint of Poetry for the Death of Liberality." In this volume there is already a decline in poetic quality. But an appendix of "Poems in diverse Humours" to this volume of 1598 presents some very interesting features. Here appears what seems to be the absolutely earliest praise of Shakespeare in a piece entitled "A Remembrance of some English Poets," in which the still unrecognized author of Venus and Adonis is celebrated by the side of Spenser, Daniel and Drayton. Here also are the sonnet, "If Music and sweet Poetry agree," and the beautiful ode beginning "As it fell upon a day," which were until recently attributed to Shakespeare himself. In the next year, 1599, The Passionate Pilgrim was published, with the words "By W. Shakespeare" on the title-page. It was long supposed that this attribution was correct, but Barnfield claimed one of the two pieces just mentioned, not only in 1598, but again in 1605. It is certain that both are his, and possibly other things in The Passionate Pilgrim also; Shakespeare's share in the twenty poems of that miscellany being doubtless confined to the five short pieces which have been definitely identified as his. In the opinion of the present writer the sonnet beginning "Sweet Cytherea" has unmistakably the stamp of Barnfield, and is probably a gloss on the first rapturous perusal of Venus and Adonis; the same is to be said of "Scarce had the sun," which is aut Barnfield, aut diabolus. One or two other contributions to The Passionate Pilgrim may be conjectured, with less confidence, to be Barnfield's. It has been stated that the poet was now studying the law at Gray's Inn, but for this the writer is unable to discover the authority, except that several members of that society are mentioned in the course of the volume of 1598. In all probability Barnfield now married and withdrew to his estate of Dorlestone (or Darlaston), in the county of Stafford, a house romantically situated on the river Trent, where he henceforth resided as a country gentleman. In 1605 he reprinted his Lady Pecunia, and this was his latest appearance as a man of letters. His son Robert Barnfield and his cousin Elinor Skrymsher were his executors when his will was proved at Lichfield; his wife, therefore, doubtless predeceased him. Barnfield died at Dorlestone Hall, and was buried in the neighbouring parish church of St Michael's, Stone, on the 6th of March 1627. The labours of Dr Grosart and of Professor Arber have thrown much light on the circumstances of Barnfield's career. He has taken of late years a far more prominent place than ever before in the history of English literature. This is due partly to the remarkable merit of his graceful, melodious and highly-coloured verse, which was practically unknown until it was privately printed in 1876 (ed. Grosart, Roxburghe Club), and at length given to the public in 1882 (ed. Arber, English Scholars' Library). It is also due to the mysterious personal relation of Barnfield to Shakespeare, a relation not easy to prove in detail, as it is built up on a great variety of small indications. It is, however, obvious that Barnfield warmly admired Shakespeare, whose earliest imitator he may be said to have been, and that between 1595 and 1600 the younger poet was so close to the elder that the compositions of the former could be confused with those of the latter. Barnfield died, as a poet, in his twenty-fifth year. Up to that time he had displayed a talent which, if he had pursued it, might have placed him very high among the English poets. As it is, he will always interest a certain number of readers as being, in his languid "Italianate" way, a sort of ineffectual Meleager in the rich Elizabethan anthology.

Besides the editions already cited, *The Affectionate Shepherd* was edited by Mr J. O. Halliwell-Phillipps for the Percy Society (*Early English Poetry*, vol. xx.); *The Encomion of Pecunia* and some other poems by J. Boswell (Roxburghe Club, 1816); and by J. P. Collier in *Illustrations of Old English Literature* (vol. i., 1866).

(E. G.)

BARNIM, the name of a district between the Spree, the Oder and the Havel, which was added to the mark of Brandenburg during the 13th century. In the 15th century it was divided into upper and lower Barnim, and these names are now borne by two circles (*Kreise*) in the kingdom of

Prussia.

BARNIM, the name of thirteen dukes who ruled over various divisions of the duchy of Pomerania. The following are the most important:—

Barnim I. (c. 1209-1278), called the *Good*, was the son of Bogislaus II., duke of Pomerania-Stettin, and succeeded to this duchy on his father's death in 1220. After he became of age he was engaged in a long struggle with external enemies, and in 1250 was compelled to recognize the supremacy of the margrave of Brandenburg. Having in 1264 united the whole of Pomerania under his rule, Barnim devoted his energies to improving its internal condition. He introduced German settlers and customs into the duchy, founded many towns, and was extremely generous towards ecclesiastical foundations. He died on the 13th or 14th of November 1278.

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Barnim III. (c. 1303-1368), called the *Great*, was the son of Otto I., duke of Pomerania-Stettin, and took a prominent part in the defence and government of the duchy before his father's death in 1344. A long and intermittent struggle with the representatives of the emperor Louis IV., who had invested his own son Louis with the mark of Brandenburg, enabled him to gain military experience and distinction. A victory gained by him in August 1332 was mainly instrumental in freeing Pomerania for a time from the vexatious claim of Brandenburg to supremacy over the duchy, which moreover he extended by conquest. Barnim assisted the emperor Charles IV. in his struggle with the family of Wittelsbach. He died on the 24th of August 1368.

Barnim XI. (1501-1573), son of Bogislaus X., duke of Pomerania, became duke on his father's death in 1523. He ruled for a time in common with his elder brother George; and after George's death in 1531 he shared the duchy with his nephew Philip I., retaining for himself the duchy of Pomerania-Stettin. The earlier years of his rule were troubled by a quarrel with the margrave of Brandenburg, who wished to annex Pomerania. In 1529, however, a treaty was made which freed Pomerania from the supremacy of Brandenburg on condition that if the ducal family became extinct the duchy should revert to Brandenburg. Barnim adopted the doctrines of Martin Luther, and joined the league of Schmalkalden, but took no part in the subsequent war. But as this attitude left him without supporters he was obliged to submit to the emperor Charles V., to pay a heavy fine, and to accept the *Interim*, issued from Augsburg in May 1548. In 1569 Barnim handed over his duchy to his grand-nephew, John Frederick, and died at Stettin on the 2nd of June 1573.

BARNSLEY (BLACK, or properly BLEAK BARNSLEY), a market town and municipal borough in the Barnsley parliamentary division of the West Riding of Yorkshire, England, 15 m. N. of Sheffield. Pop. (1891) 35,427; (1901) 41,086. It is served by the Midland, Great Central, Lancashire & Yorkshire, Great Northern, and Hull & Barnsley railways. It is in the parish of Silkstone, which gives name to important collieries. It is situated on rising ground west of the river Dearne, and, though it loses in attraction owing to its numerous factories, its neighbourhood has considerable natural beauty. Among the principal buildings and institutions are several churches, of which the oldest, the parish church of St Mary, was built in 1821 on an early site; court house, public hall, institute and free library. Among several educational institutions, the free grammar school dates from 1665; and a philosophical society was founded in 1828. A monument was erected in 1905 to prominent members of the Yorkshire Miners' Association. The park was presented in 1862 by the widow of Joseph Locke, M.P. The manufacture of iron and steel, and the weaving of linen and other cloth, are the two principal industries; but there are also bleachfields, printfields, dyeworks, sawmills, cornmills and malt-houses; and the manufacture of glass, needles and wire is carried on. There are large coalfields in the neighbourhood, which, indeed, extend under the town. Coal and coke are largely exported to London and Hull. In the vicinity, Monk Bretton Priory, a Cluniac foundation of 1157, retains a Perpendicular gatehouse, some Decorated domestic remains, and fragments of the church. Wentworth Castle, built in 1730 by Thomas, earl of Strafford, stands in a singularly beautiful park, and contains a fine collection of portraits of historical interest. Besides the communications afforded by railway, Barnsley has the advantage of connexion with the Aire and Calder Navigation system of canals. The borough is under a mayor, six aldermen and eighteen councillors. Area, 2385 acres.

At the time of the Domesday survey Ilbert de Lacy held Barnsley by gift of William the Conqueror as part of the honour of Pontefract, and the overlordship remained in his family until the reign of Stephen, when it was granted by Henry de Lacy to the monks of Pontefract. Henry III. in 1249 granted the prior and convent of Pontefract a market every Wednesday at Barnsley, and a fair on the vigil and feast of St Michael and two following days, and Henry VIII. in 1512 granted them a new fair on the day of the Conversion of St Paul and two following days. The monastery evidently also held another fair there called St Ellen's fair, for in 1583 Queen Elizabeth granted this fair and St Paul's fair and the market "lately belonging to the dissolved monastery of Pontefract" to one Henry Burdett, and Ralph and Henry his sons for their lives. Besides these charters and others granting land in Barnsley to the monks of Pontefract there is very little history of the town, since it was not until after the introduction of the linen manufacture in 1744 that it became really important. Before that time the chief industry had been wire-drawing, but this trade began to decrease about the end of the 18th century, just as the linen trade was becoming important. In 1869 Barnsley was incorporated.

See Rowland Jackson, *The History of the Town and Township of Barnsley* (1858); *Victoria County History—Yorkshire*.

BARNSTABLE, a seaport township and the county-seat of the county of the same name, in Massachusetts, U.S.A. Pop. (1900) 4364, of whom 391 were foreign-born; (1910, U.S. census)

4676. Barnstable is served by the New York, New Haven & Hartford Railway. It is situated between Cape Cod Bay on the N. and Nantucket Sound on the S., extending across Cape Cod. The soil of the township, unlike that of other parts of the county, is well adapted to agriculture, and the principal industry is the growing of vegetables and the supplying of milk and poultry for its several villages, nearly all of which are summer resorts. At Hyannis is a state normal school (1897; co-educational). Cranberries are raised in large quantities, and there are oyster and other shell fisheries. In the 17th century the mackerel and whale fisheries were the basis of economic life; the latter gave way later to the cod and other fisheries, but the fishing industry is now relatively unimportant. Much of the county is a region of sands, salt-marshes, beach-grass and scattered woods. From 1865 to 1895 the county diminished 20.1% in population. Barnstable was settled and incorporated in 1639 (county created 1685), and includes among its natives James Otis and Lemuel Shaw.

See F. Freeman, *The History of Cape Cod: the Annals of Barnstable County* (2 vols., Boston, 1858, 1862; and other impressions 1860 to 1869).

BARNSTAPLE, a seaport, market town and municipal borough, in the Barnstaple parliamentary division of Devonshire, England, on the river Taw, near the north coast. Pop. (1901) 14,137. It is served by the London & South-Western, the Great Western, and the Lynton & Barnstaple railways. The Taw is here crossed by a stone bridge of sixteen arches, said to have been built in the 12th or 13th century. The town manufactures lace, gloves, sail-cloth and fishing-nets, and has extensive potteries, tanneries, sawmills and foundries, while shipbuilding is also carried on. The harbour admits only small coasting vessels. The public buildings and institutions include a guildhall (1826), a free grammar school and a large market-place. The poet John Gay was born in the vicinity, and received his education at the grammar school, which at an earlier period had numbered Bishop Jewel among its pupils. It was founded in the 14th century, in connexion with a chantry. There are also some curious Jacobean almshouses. The borough is under a mayor, six aldermen and eighteen councillors. Area, 2236 acres.

Barnstaple (Berdestaple, Barnstapol, Barstaple, also Barum) ranks among the most ancient of royal boroughs. As early as Domesday, where it is several times mentioned, there were forty burgesses within the town and nine without, who rendered 40s. Tradition claims that King Athelstan threw up defensive earthworks here, but the existing castle is attributed to Joel of Totnes, who held the manor during the reign of William the Conqueror, and also founded a Cluniac priory, dedicated to St Mary Magdalene. From this date the borough and priory grew up side by side, but each preserving its independent privileges and rights of government until the dissolution of the latter in 1535. In Edward II.'s reign the burgesses petitioned for the restoration of rights bestowed by a pretended charter from Athelstan. The existence of this charter was denied, but the desired privileges were conceded, including the right to elect a mayor. The earliest authenticated charter is that of Henry I., which was confirmed in a charter of Henry II. The later charter states that the burgesses should have customs similar to those granted to London, and further charters confirmed the same right. A charter of Queen Mary in 1556 added some new privileges, and specified that the common council should consist of a mayor, two aldermen and twenty-four chief burgesses. James I., by a charter dated 1610, increased the number of chief burgesses to twenty-five and instituted a recorder, a clerk of the market, justices of the peace and other officers. This charter was confirmed in 1611 and 1689, and held force until the Municipal Corporations Act of 1835, which established six aldermen and eighteen councillors. The borough sent two members to parliament in 1295, and so continued to do until the Redistribution of Seats Act of 1885, when the representation was merged in that of the county. Barnstaple was once famous for its woollen trade, now entirely declined, and as early as the reign of Edward III. was an important naval port, with an extensive shipping trade. That this prosperity was not altogether uninterrupted is testified by the fact that, at the time of the Armada, the mayor pleaded inability to contribute three ships, on account of injuries to trade consequent on the war with Spain. The Friday market and the annual four days' fair in September are held by immemorial prescription.

See J. B. Gribble, Memorials of Barnstaple (Barnstaple, 1830).

BARNUM, PHINEAS TAYLOR (1810-1891), American showman, was born in Bethel, Connecticut, on the 5th of July 1810, his father being an inn- and store-keeper. Barnum first started as a store-keeper, and was also concerned in the lottery mania then prevailing in the United States. After failing in business, he started in 1829 a weekly paper, The Herald of Freedom, in Danbury; after several libel suits and a prosecution which resulted in imprisonment, he moved to New York in 1834, and in 1835 began his career as a showman, with his purchase and exploitation of a coloured woman, Joyce Heth, reputed to have been the nurse of George Washington, and to be over a hundred and sixty years old. With this woman and a small company he made well-advertised and successful tours in America till 1839, though Joyce Heth died in 1836, when her age was proved to be not more than seventy. After a period of failure, he purchased Scudder's American Museum, New York, in 1841; to this he added considerably, and it became one of the most popular shows in the United States. He made a special hit by the exhibition, in 1842, of Charles Stratton, the celebrated "General Tom Thumb" (see Dwarf). In 1844 Barnum toured with the dwarf in England. A remarkable instance of his enterprise was the engagement of Jenny Lind to sing in America at \$1000 a night for one hundred and fifty nights, all expenses being paid by the entrepreneur. The tour began in 1850. Barnum retired from the show business in 1855, but had to settle with his creditors in 1857, and began his old career again as showman and museum proprietor. In 1871 he established the "Greatest Show on Earth,"

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a travelling amalgamation of circus, menagerie and museum of "freaks," &c. This show, incorporated in the name of "Barnum, Bailey & Hutchinson," and later as "Barnum & Bailey's" toured all over the world. In 1907 the business was sold to Ringling Brothers. Barnum wrote several books, such as *The Humbugs of the World* (1865), *Struggles and Triumphs* (1869), and his *Autobiography* (1854, and later editions). He died on the 7th of April 1891.

BAROCCHIO (or Barozzi), GIACOMO, called Da Vignola (1507-1573), Italian architect, was born at Vignola in the Modenese territory on the 1st of October 1507. His early work was conducted at Bologna, Piacenza, Assisi and Perugia, until he was summoned to Rome as papal architect under Pope Julius III. In 1564 he succeeded Michelangelo as the architect of St Peter's, and executed various portions of that fabric, besides a variety of works in Rome. The designs for the Escorial were also supplied by him. He is the author of an excellent work on the *Five Orders of Architecture* (Rome, 1563), and another work on *Practical Perspective* (Rome, 1583). To his extensive acquirements and exquisite taste were superadded an amenity of manners and a noble generosity that won the affection and admiration of all who knew him. He died in Rome on the 7th of July 1573. He was an eminent upholder of the classic style at a period when the style known as *baroque* was corrupting the architecture of Italy. The term *baroque* owes its origin to the Spanish word *barrueco* or *berrueco*, an imperfectly round pearl, and is not derived from the architect Barocchio, whose name so much resembles it. Yet it is curious that it was much used to describe a debased form of architecture encouraged by the Jesuits whose church in Rome was built by Barocchio.

BAROCCI (or Baroccio), **FEDERIGO** (1528-1612), Italian painter, was born at Urbino, where the genius of Raphael inspired him. In his early youth he travelled to Rome, where he painted in fresco and was warmly commended by Michelangelo. He then returned to Urbino, where, with the exception of some short visits to Rome, he continued to reside till his death. He acquired great fame by his paintings of religious subjects, in the style of which he to some extent imitated Correggio. His own followers were very numerous, but according to Lanzi (*Hist. of Painting*) carried their master's peculiarities to excess. Barocci also etched from his own designs a few prints, which are highly finished, and executed with great softness and delicacy.

BARODA, a native state of India, within the Gujarat province of Bombay, but in direct relations with the governor-general. It consists of four isolated divisions, each of which is interlaced in the most intricate fashion with British territory or with other native states. Three of these divisions—Kadi, Baroda and Nausari—are in Gujarat proper; the fourth, Amreli with Okhamandal, is in the peninsula of Kathiawar. The total area covers 8099 sq. m. In 1901 the population was 1,952,692, showing a decrease of 19% in the decade, compared with an increase of 11% in the preceding decade. This decrease was due partly to the famines of 1896-1897 and 1900-1901, partly to the epidemics of cholera and fever which accompanied them, and partly to the plague which attacked the state in as great measure as the surrounding presidency.

The princes of Baroda were one of the chief branches of the Mahratta confederacy, which in the 18th century spread devastation and terror over India. About 1721 one Pilaji gaekwar carved a fertile slice of territory out of Gujarat, and afterwards received the title of "Leader of the Royal Troops" from the peshwa. During the last thirty-two years of the century the house fell a prey to one of those bitter and unappeasable family feuds which are the ruin of great Indian families. In 1800 the inheritance descended to a prince feeble in body and almost idiotic in mind. British troops were sent in defence of the hereditary ruler against all claimants; a treaty was signed in 1802, by which his independence of the peshwa and his dependence on British government were secured. Three years later these and various other engagements were consolidated into a systematic plan for the administration of the Baroda territory, under a prince with a revenue of three-quarters of a million sterling, perfectly independent in all internal matters, but practically kept on his throne by subsidiary British troops. For some time the history of the gaekwars was very much the same as that of most territorial houses in India: an occasional able minister, more rarely an able prince; but, on the other hand, a long dreary list of incompetent heads, venal advisers and taskmasters oppressive to the people. At last a fierce family feud came to a climax. In 1873 an English committee of inquiry was appointed to investigate various complaints of oppression against the gaekwar, Malhar Rao, who had recently succeeded to the throne after being for a long time kept in prison by his brother, the former gaekwar. No real reform resulted, and in 1874 an attempt at poisoning the British resident led to the gaekwar being formally accused of the crime and tried by a mixed commission. The result of the trial (1875) was a failure to obtain a unanimous verdict on the charge of poisoning; the viceroy, Lord Northbrook, however, decided to depose Malhar Rao on the ground of gross misgovernment, the widow of his brother and predecessor, Khande Rao, being permitted to adopt an heir from among the descendants of the founder of the family. This heir, by name Sayaji Rao, then a boy of twelve years in the humble home of a Deccani cultivator, was educated by an English tutor, the administration being meanwhile placed for eight years under the charge of Sir T. Madhava Rao, formerly diwan of Travancore, one of the ablest and most enlightened of Indian statesmen. The result was a conspicuous success. The gaekwar showed himself a model prince, and his territories became as well governed and prosperous as a British district. He repeatedly visited Europe in company with his wife. In 1887 the queen-empress conferred upon him at Windsor the insignia of G.C.S.I., and in 1892 upon his wife the Imperial order of the crown of India.

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The gross revenue of the state is more than a million sterling. In 1901 the state currency of Babashai rupees was withdrawn, and the British rupee was introduced. The regular military force consists of a field battery, with several regiments of cavalry and battalions of infantry. In

addition, there is an irregular force of horse and foot. Compulsory education has been carried on experimentally since 1893 in the Amreli division with apparent success, the compulsory age being 7 to 12 for boys and 7 to 10 for girls. Special measures are also adopted for the education of low castes and aboriginal tribes. There is a female training college under a Christian lady superintendent. The Kala Bhavan, or technical school, has departments for drawing, carpentry, dyeing, weaving and agriculture. There is also a state museum under a European director, and a state library. Portions of the state are crossed by the Bombay & Baroda and the Rajputana railways. In addition, the state has constructed three railways of its own, on three different gauges. Other railways are in contemplation. The state possesses a cotton mill.

The city of Baroda is situated on the river Viswamitri, a station on the Bombay & Baroda railway, 245 m. N. of Bombay by rail. Pop. (1901) 103,790. The whole aspect of the city has been changed by the construction of handsome public buildings, the laying-out of parks and the widening of the streets. An excellent water-supply is provided from the Ajwa lake. The cantonments, garrisoned by a native infantry regiment, are under British jurisdiction, and have a population of 4000. The city contains a college and many schools. The chief hospitals are called after the countess of Dufferin, Sayaji Rao and Jamnabai, the widow of Khande Rao.

See Baroda Gazetteer, 1908.

BAROMETER (from Gr. βάρος, pressure, and μέτρον, measure), an instrument by which the weight or pressure of the atmosphere is measured. The ordinary or mercurial barometer consists of a tube about 36 in. long, hermetically closed at the upper end and containing mercury. In the "cistern barometer" the tube is placed with its open end in a basin of mercury, and the atmospheric pressure is measured by the difference of the heights of the mercury in the tube and the cistern. In the "siphon barometer" the cistern is dispensed with, the tube being bent round upon itself at its lower end; the reading is taken of the difference in the levels of the mercury in the two limbs. The "aneroid" barometer (from the Gr. α- privative, and νηρός, wet) employs no liquid, but depends upon the changes in volume experienced by an exhausted metallic chamber under varying pressures. "Baroscopes" simply indicate variations in the atmospheric pressure, without supplying quantitative data. "Barographs" are barometers which automatically record any variations in pressure.

Philosophers prior to Galileo had endeavoured to explain the action of a suction pump by postulating a principle that "Nature abhorred a vacuum." When Galileo observed that a common suction pump could not raise water to a greater height than about 32 ft. he considered that the "abhorrence" was limited to 32 ft., and commended the matter to the attention of his pupil Evangelista Torricelli. Torricelli perceived a ready explanation of the observed phenomenon if only it could be proved that the atmosphere had weight, and the pressure which it exerted was equal to that of a 32-ft. column of water. He proved this to be the correct explanation by reasoning as follows:—If the atmosphere supports 32 feet of water, then it should also support a column of about 2½ ft. of mercury, for this liquid is about 13½ times heavier than water. This he proved in the following manner. He selected a glass tube about a quarter of an inch in diameter and 4 ft. long, and hermetically sealed one of its ends; he then filled it with mercury and, applying his finger to the open end, inverted it in a basin containing mercury. The mercury instantly sank to nearly 30 in. above the surface of the mercury in the basin, leaving in the top of the tube an apparent vacuum, which is now called the Torricellian vacuum; this experiment is sometimes known as the Torricellian experiment. Torricelli's views rapidly gained ground, notwithstanding the objections of certain philosophers. Valuable confirmation was afforded by the variation of the barometric column at different elevations. René Descartes and Blaise Pascal predicted a fall in the height when the barometer was carried to the top of a mountain, since, the pressure of the atmosphere being diminished, it necessarily followed that the column of mercury sustained by the atmosphere would be diminished also. This was experimentally observed by Pascal's brother-in-law, Florin Périer (1605-1672), who measured the height of the mercury column at various altitudes on the Puy de Dôme. Pascal himself tried the experiment at several towers in Paris,—Notre Dame, St Jacques de la Boucherie, &c. The results of his researches were embodied in his treatises De l'équilibre des liqueurs and De la pesanteur de la masse d'air, which were written before 1651, but were not published till 1663 after his death. Corroboration was also afforded by Marin Mersenne and Christiaan Huygens. It was not long before it was discovered that the height of the column varied at the same place, and that a rise or fall was accompanied by meteorological changes. The instrument thus came to be used as a means of predicting the weather, and it was frequently known as the weather-glass. The relation of the barometric pressure to the weather is mentioned by Robert Boyle, who expressed the opinion that it is exceedingly difficult to draw any correct conclusions. Edmund Halley, Leibnitz, Jean André Deluc (1727-1817) and many others investigated this subject, giving rules for predicting the weather and attempting explanations for the phenomena. Since the height of the barometric column varies with the elevation of the station at which it is observed, it follows that observations of the barometer afford a means for measuring altitudes. The early experiments of Pascal were developed by Edmund Halley, Edme Mariotte, J. Cassini, D. Bernoulli, and more especially by Deluc in his Recherches sur les modifications de l'atmosphère (1772), which contains a full account of the early history of the barometer and its applications. More highly mathematical investigations have been given by Laplace, and also by Richard Ruhlmann (Barometrischen Hohenmessung., Leipzig, 1870). The modern aspects of the relation between atmospheric pressure and the weather and altitudes are treated in the article Meteorology.

Many attempts have been made by which the variation in the height of the mercury column could be magnified, and so more exact measurements taken. It is not possible to enumerate in this article the many devices which have been proposed; and the reader is referred to Charles Hutton's Mathematical and Philosophical Dictionary (1815), William Ellis's paper on the history of the barometer in the Quarterly Journal of the Royal Meteorological Society, vol. xii. (1886), and E. Gerland and F. Traumüller's Geschichte der physikalischen Experimentierkunst (1899). Descartes suggested a method which Huygens put into practice. The barometer tube was expanded into a cylindrical vessel at the top, and into this chamber a fine tube partly filled with water was inserted. A slight motion of the mercury occasioned a larger displacement of the water, and hence the changes in the barometric pressure were more readily detected and estimated. But the instrument failed as all water-barometers do, for the gases dissolved in the water coupled with its high vapour tension destroy its efficacy. The substitution of methyl salicylate for the water has been attended with success. Its low vapour tension (Sir William Ramsay and Sydney Young give no value below 70° C.), its low specific gravity (1.18 at 10° C.), its freedom from viscosity, have contributed to its successful use. In the form patented by C. O. Bartrum it is claimed that readings to .001 of an inch of mercury can be taken without the use of

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The diagonal barometer, in which the upper part of the tube is inclined to the lower part, was suggested by Bernardo Ramazzini (1633-1714), and also by Sir Samuel Morland (or Moreland). This form has many defects, and even when the tube is bent through 45° the readings are only increased in the ratio of 7 to 5. The wheel barometer of Dr R. Hooke, and the steel-yard barometer, endeavour to magnify the oscillation of the mercury column by means of a float resting on the surface of the mercury in the cistern; the motion of the float due to any alteration in the level of the mercury being rendered apparent by a change in the position of the wheel or steel-yard. The pendant barometer of G. Amontons, invented in 1695, consists of a funnel-shaped tube, which is hung vertically with the wide end downwards and closed in at the upper end. The tube contains mercury which adjusts itself in the tube so that the length of the column balances the atmospheric pressure. The instability of this instrument is obvious, for any jar would cause the mercury to leave the tube.

The *Siphon Barometer* (fig. 1) consists of a tube bent in the form of a siphon, and is of the same diameter throughout. A graduated scale passes along the whole length of the tube, and the height of the barometer is ascertained by taking the difference of the readings of the upper and lower limbs respectively. This instrument may also be read by bringing the zero-point of the graduated scale to the level of the surface of the lower limb by means of a screw, and reading off the height at once from the surface of the upper limb. This barometer requires no correction for errors of capillarity or capacity. Since, however, impurities are contracted by the mercury in the lower limb, which is usually in open contact with the air, the satisfactory working of the instrument comes soon to be seriously interfered with.



Fig. 2. Cistern

Fig. 2 shows the *Cistern Barometer* in its essential and simplest form. This barometer is subject to two kinds of error, the one arising from capillarity, and the other from changes in the level of the surface of the cistern as the mercury rises and falls in the tube, the latter being technically called the *error of capacity*. If a glass tube of small bore be plunged into a vessel containing mercury, it will be observed that the level of the mercury in the tube is not in the line of that of the mercury in the vessel, but somewhat below it, and that the surface is convex. The convex of the convex

in the vessel, but somewhat below it, and that the surface is convex. The capillary depression is inversely proportional to the diameter of the tube. In standard barometers, the tube is about an inch in diameter, and the error due to capillarity is less than .001 of an inch. Since capillarity depresses the height of the column, cistern barometers require an addition to be made to the observed height, in order to give the true pressure, the amount depending, of course, on the diameter of the tube.

The error of capacity arises in this way. The height of the barometer is the perpendicular distance between the surface of the mercury in the cistern and the upper surface of the mercurial column. Now, when the barometer falls from 30 to 29

inches, an inch of mercury must flow out of the tube and pass into the cistern, thus raising the cistern level; and, on the other hand, when the barometer rises, mercury must flow out of the cistern into the tube, thus lowering the level of the mercury in the cistern. Since the scales of barometers are usually engraved on their brass cases, which are fixed (and, consequently, the zero-point from which the scale is graduated is also fixed), it follows that, from the incessant changes in the level of the cistern, the readings would be sometimes too high and sometimes too low, if no provision were made against this source of error.

A simple way of correcting the error of capacity is—to ascertain (1) the neutral point of the instrument, or that height at which the zero of the scale is exactly at the height of the surface of the cistern, and (2) the rate of error as the barometer rises or falls above this point, and then apply a correction proportional to this rate. The instrument in which the

error of capacity is satisfactorily (indeed, entirely) got rid of is Fortin's Barometer. Barometer. Fig. 3 shows how this is effected. The upper part of the cistern

is formed of a glass cylinder, through which the level of the mercury may be seen. The bottom is made like a bag, of flexible leather, against which a screw works. At the top of the interior of the

Siphon

Barometer.

cistern is a small piece of ivory, the point of which coincides with the zero of the scale. By means of the screw, which acts on the flexible cistern bottom, the level of the mercury can be raised or depressed so as to bring the ivory point exactly to the surface of the mercury in the cistern. In some barometers the cistern is fixed, and the ivory point is brought to the level of the mercury in the cistern by raising or depressing the scale.

In constructing the best barometers three materials are employed, viz.:-(1) brass, for the case, on which the scale is engraved; (2) glass, for the tube containing the mercury; and (3) the mercury itself. It is evident that if the coefficient of expansion of mercury and brass were the same, the height of the mercury as indicated by the brass scale would be the true height of the mercurial column. But this is not the case, the coefficient of expansion for mercury being considerably greater than that for brass. The result is that if a barometer stand at 30 in. when the temperature of the whole instrument, mercury and brass, is 32°, it will no longer stand at 30 in. if the temperature be raised to 69°; in fact, it will then stand at 30.1 in. This increase in the height of the column by the tenth of an inch is not due to any increase of pressure, but altogether to the greater expansion of the mercury at the higher temperature, as compared with the expansion of the brass case with the engraved scale by which the height is measured. In order, therefore, to compare with each other with exactness barometric observations made at different temperatures, it is necessary to reduce them to the heights at which they would stand at some uniform temperature. The temperature to which such observations are reduced is 32° Fahr. or 0° cent.



Fig. 3.— Fortin's Barometer.

If English units be used (Fahrenheit degrees and inches), this correction is given by the formula

Corrections of the barometer reading.

$$x = -H \frac{.09T - 2.56}{1000},$$

in the centigrade-centimetre system the correction is .0001614 HT (H being the observed height and T the observed temperature). Devices have been invented which determine these corrections mechanically, and hence obviate the necessity of applying the above formula, or of referring to tables in which these corrections for any height of the column and any temperature are given.

The standard temperature of the English yard being 62° and not 32°, it will be found in working out the corrections from the above formula that the temperature of no correction is not 32° but 28.5°. If the scale be engraved on the glass tube, or if the instrument be furnished with a glass scale or with a wooden scale, different corrections are required. These may be worked out from the above formula by substituting for the coefficient of the expansion of brass that of glass, which is assumed to be 0.00000498, or that of wood, which is assumed to be 0. Wood, however, should not be used, its expansion with temperature being unsteady, as well as uncertain.

If the brass scale be attached to a wooden frame and be free to move up and down the frame, as is the case with many siphon barometers, the corrections for brass scales are to be used, since the zero-point of the scale is brought to the level of the lower limb; but if the brass scale be *fixed* to a wooden frame, the corrections for brass scales are only applicable provided the zero of the scale be fixed at (or nearly at) the zero line of the column, and be free to expand upwards. In siphon barometers, with which an observation is made from two readings on the scale, the scale must be free to expand in one direction. Again, if only the upper part of the scale, say from 27 to 31 in., be screwed to a wooden frame, it is evident that not the corrections for brass scales, but those for wooden scales must be used. No account need be taken of the expansion of the glass tube containing the mercury, it being evident that no correction for this expansion is required in the case of any barometer the height of which is measured from the surface of the mercury in the cistern.

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In fixing a barometer for observation, it is indispensable that it be hung in a perpendicular position, seeing that it is the *perpendicular distance* between the surface of the mercury in the cistern and the top of the column which is the true height of the barometer. The surface of the mercury column is

Position of barometer.

convex, and in noting the height of the barometer, it is not the chord of the curve, but its tangent which is taken. This is done by setting the straight lower edge of the vernier, an appendage with which the barometer is furnished, as a tangent to the curve. The vernier is made to slide up and down the scale, and by it the height of the barometer may be read true to 0.002 or even to 0.001 in.

It is essential that the barometer is at the temperature shown by the attached thermometer. No observation can be regarded as good if the thermometer indicates a temperature differing from that of the whole instrument by more than a degree. For every degree of temperature the attached thermometer differs from the barometer, the observation will be faulty to the extent of about 0.003 in., which in discussions of diurnal range, &c., is a serious amount.

Before being used, barometers should be thoroughly examined as to the state of the mercury, the size of cistern (so as to admit of low readings), and their agreement with some known standard instrument at different points of the scale. The pressure of the atmosphere is not expressed by the weight of the mercury sustained in the tube by it, but by the perpendicular height of the column. Thus, when the height of the column is 30 in., it is not said that the atmospheric pressure

is 14.7 lb on the square inch, or the weight of the mercury filling a tube at that height whose transverse section equals a square inch, but that it is 30 in., meaning that the pressure will sustain a column of mercury of that height.

It is essential in gasometry to fix upon some standard pressure to which all measurements can be reduced. The height of the standard mercury column commonly used is 76 cms. (29.922 in.) of pure mercury at 0°; this is near the average height of the barometer. Since the actual *force* exerted by the atmosphere varies with the intensity of gravity, and therefore with the position on the earth's surface, a place must be specified in defining the standard pressure. This may be avoided by expressing the force as the pressure in dynes due to a column of mercury, one square centimetre in section, which is supported by the atmosphere. If H cms. be the height at 0°, and g the value of gravity, the pressure is 13.596 Hg dynes (13.596 being the density of mercury). At Greenwich, where g=981.17, the standard pressure at 0° is 1,013,800 dynes. At Paris the pressure is 1,013,600 dynes. The closeness of this unit to a mega-dyne (a million dynes) has led to the suggestion that a mega-dyne per square centimetre should be adopted as the standard pressure, and it has been adopted by some modern writers on account of its convenience of calculation and independence of locality.

The height of the barometer is expressed in English inches in England and America, but the metric system is used in all scientific work excepting in meteorology. In France and most European countries, the height is given in millimetres, a millimetre being the thousandth part of a metre, which equals 39.37079 English inches. Up to 1869 the barometer was given in half-lines in Russia, which, equalling the twentieth of an English inch, were readily reduced to English inches by dividing by 20. The metric barometric scale is now used in Russia. In a few European countries the French or Paris line, equalling 0.088814 in., is sometimes used. The English measure of length being a standard at 62° Fahr., the old French measure at 61.2°, and the metric scale at 32°, it is necessary, before comparing observations made with the three barometers, to reduce them to the same temperature, so as to neutralize the inequalities arising from the expansion of the scales by heat.

The symplezometer was invented in 1818 by Adie of Edinburgh. It is a revived form of Hooke's marine barometer. It consists of a glass tube, with a small chamber at the top and an open cistern below. The upper part of the

Sympiezometer.

tube is filled with air, and the lower part and cistern with glycerin. When atmospheric pressure is increased, the air is compressed by the rising of the fluid; but when it is diminished the fluid falls, and the contained air expands. To correct for the error arising from the increased pressure of the contained air when its temperature varies, a thermometer and sliding-scale are added, so that the instrument may be adjusted to the temperature at each observation. It is a sensitive instrument, and well suited for rough purposes at sea and for travelling, but not for exact observation. It has long been superseded by the *Aneroid*, which far exceeds it in handiness.

Aneroid Barometer.—Much obscurity surrounds the invention of barometers in which variations in pressure are rendered apparent by the alteration in the volume of an elastic chamber. The credit of the invention is usually given to Lucien Vidie, who patented his instrument in 1845, but similar instruments were in use much earlier. Thus in 1799 Nicolas Jacques Conté (1755-1805), director of the aerostatical school at Meudon, and a man of many parts—a chemist, mechanician and painter,—devised an instrument in which the lid of the metal chamber was supported by internal springs; this instrument was employed during the Egyptian campaign for measuring the altitudes of the war-balloons. Although Vidie patented his device in 1845, the commercial manufacture of aneroids only followed after E. Bourdon's patent of the metallic manometer in 1849, when Bourdon and Richard placed about 10,000 aneroids on the market. The production was stopped by an action taken by Vidie against Bourdon for infringing the former's patent, and in 1858 Vidie obtained 25,000 francs (£1000) damages.

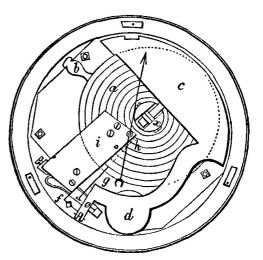


Fig. 4.—Aneroid Barometer.

Fig. 4 represents the internal construction, as seen when the face is removed, but with the hand still attached, of an aneroid which differs only slightly from Vidie's form. a is a flat circular metallic box, having its upper and under surfaces corrugated in concentric circles. This box or chamber being partially exhausted of air, through the short tube b, which is subsequently made air-tight by soldering, constitutes a spring, which is affected by every variation of pressure in the external atmosphere, the corrugations on its surface increasing its elasticity. At the centre of the upper surface of the exhausted chamber there is a solid cylindrical projection x, to the top of which the principal lever cde is attached. This lever rests partly on a spiral spring at d; it is also supported by two vertical pins, with perfect freedom of motion. The end e of the lever is attached to a second or small lever f, from which a chain g extends to h, where it works on a drum attached to the axis of the hand, connected with a hair spring at h, changing the motion from vertical to horizontal, and regulating the hand, the attachments of which are made to the metallic plate i. The motion originates in the corrugated elastic box a, the surface of which is depressed or

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elevated as the weight of the atmosphere is increased or diminished, and this motion is communicated through the levers to the axis of the hand at h. The spiral spring on which the lever rests at d is intended to compensate for the effects of alterations of temperature. The actual movement at the centre of the exhausted box, whence the indications emanate, is very slight, but by the action of the levers is multiplied 657 times at the point of the hand, so that a movement of the 220th part of an inch in the box carries the point of the hand through three inches on the dial. The effect of this combination is to multiply the smallest degrees of atmospheric pressure, so as to render them sensible on the index. Vidie's instrument has been improved by Vaudet and Hulot. Eugène Bourdon's aneroid depends on the same principle. The aneroid requires, however, to be repeatedly compared with a mercurial barometer, being liable to changes from the elasticity of the metal chamber changing, or from changes in the system of levers which work the pointer. Though aneroids are constructed showing great accuracy in their indications, yet none can lay any claim to the exactness of mercurial barometers. The mechanism is liable to get fouled and otherwise go out of order, so that they may change 0.300 in. in a few weeks, or even indicate pressure so inaccurately and so irregularly that no confidence can be placed in them for even a few days, if the means of comparing them with a mercurial barometer be not at hand.

The mercurial barometer can be made self-registering by concentrating the rays from a source of light by a lens, so that they strike the top of the mercurial column, and having a sheet of sensitized paper attached to a frame and placed behind a screen, with a narrow vertical slit in the line of the rays. The mercury being opaque throws a part of the paper in the shade, while above the mercury the rays from the lamp pass unobstructed to the paper. The paper being carried steadily round on a drum at a given rate per hour, the height of the column of mercury is photographed continuously on the paper. From the photograph the height of the barometer at any instant may be taken. The principle of the aneroid barometer has been applied to the construction of barographs. The lever attached to the collapsible chamber terminates in an ink-fed style which records the pressure of the atmosphere on a moving ribbon. In all continuously registering barometers, however, it is necessary, as a check, to make eye-observations with a mercury standard barometer hanging near the registering barometer from four to eight times daily.

See Marvin, *Barometers and the Measurement of Atmospheric Pressure* (1901); and C. Abbe, *Meteorological Apparatus* (1888). Reference may also be made to B. Stewart and W. W. H. Gee, *Practical Physics* (vol. i. 1901), for the construction of standard barometers, their corrections and method of reading.

BAROMETRIC LIGHT, the luminous glow emitted by mercury in a barometer tube when shaken. It was first observed by Jean Picard, and formed the subject of many experiments at the hands of Francis Hawksbee. The latter showed that the Torricellian vacuum was not essential to the phenomenon, for the same glow was apparent when mercury was shaken with air only partially rarefied. The glow is an effect of the electricity generated by the friction of the mercury and the air in the barometer tube.

BARON, MICHEL (1653-1729), French actor (whose family name originally was Boyron), was born in Paris, the son of a leading actor (d. 1655) and of a talented actress (d. 1662). At the age of twelve he joined the company of children known as the *Petits Comédiens Dauphins*, of which he was the brightest star. Molière was delighted with his talent, and with the king's permission secured him for his own company. In consequence of a misunderstanding with Molière's wife, the actor withdrew from the dramatist's company, but rejoined it in 1670, reappearing as Domitien in Corneille's *Tite et Bérénice*, and in his *Psyche*. He remained in this company until Molière's death. He then became a member of the company at the Hôtel de Bourgogne, and from this time until his retirement in 1691 was undisputed master of the French stage, creating many of the leading rôles in Racine's tragedies, besides those in two of his own comedies, *L'Homme à bonnes fortunes* (1686), and *La Coquette* (1687). He also wrote *Les Enlèvements* (1685), *Le Débauché* (1689), and translated and acted two plays of Terence. In 1720 Baron reappeared at the Palais Royal, and his activity on the stage was renewed in a multitude of parts. He died on the 22nd of December 1729.

His son Étienne Michel Baron (1676-1711) was also a fine actor, and left a son and two daughters who all played at the Comédie Française.

See George Monval, *Un Comédien amateur d'art* (1893); also the Abbé d'Allamial's *Lettres à mylord XXX. sur Baron et la demoiselle Lecouvreur*, in F. G. J. S. Andrieux's *Collection des mémoires sur l'art dramatique* (1822).

BARON. This word, of uncertain origin, was introduced into England at the Conquest to denote "the man" (*i.e.* one who had done him "homage") of a great lord, and more especially of the king. All who held "in chief" (*i.e.* directly) of the king were alike *barones regis*, bound to perform a stipulated service, and members, in theory at least, of his council. Great nobles, whether earls or not, also spoke of their tenants as "barons," where lesser magnates spoke of their "men" (*homines*). This was especially the case in earldoms of a palatine character, such as Chester, where the earl's barons were a well-recognized body, the Venables family, "barons of Kinderton," continuing in existence down to 1679. In the palatinate of Durham also, the bishop had his barons, among whom the Hiltons of Hilton Castle were usually styled "Barons of Hilton" till extinct in 1746. Other families to whom the title was accorded, independently of peerage dignity and on somewhat uncertain grounds, were "the barons of Greystock," "the barons of Stafford," and the Cornwalls, "barons of Burford." Fantosme makes Henry II. speak of "mes baruns de

Lundres"; John's charter granting permission to elect a mayor speaks of "our barons of our city of London," and a London document even speaks of "the greater barons of the city." The aldermen seem to have been loosely deemed equivalent to barons and were actually assessed to the poll-tax as such under Richard II. In Ireland the palatine character of the great lordships made the title not uncommon (e.g. the barons of Galtrim, the barons of Slane, the barons of the Naas).

As all those who held direct of the crown by military service (for those who held "by serjeanty" appear to have been classed apart), from earls downwards, were alike "barons," the great difference in their position and importance must have led, from an early date, to their being roughly divided into "greater" and "lesser" barons, and indeed, under Henry II., the *Dialogus de Scaccario* already distinguishes their holdings as "greater" or "lesser" baronies. Within a century of the Conquest, as we learn from Becket's case (1164), there arose the practice of sending to the greater barons a special summons to the council, while the lesser barons, it is stipulated in Magna Carta (1215), were to be summoned only through the sheriffs. Thus was introduced a definite distinction, which eventually had the effect of restricting to the greater barons the rights and privileges of peerage.

Thus far the baron's position was connected with the tenure of land; in theory the barons were those who held their lands of the king; in practice, they were those who so held a large amount of land. The great change in their status was effected when their presence in that council of the realm which became the House of Lords was determined by the issue of a writ of summons, dependent not on the tenure of land, but only on the king's will. Camden's statement that this change was made by Henry III. after "the Barons' War" was long and widely accepted, but it is now assigned, as by Stubbs, to Edward I., and the earliest writs accepted as creating hereditary baronies are those issued in his reign. It must not, however, be supposed that those who received such summons were as yet distinguished from commoners by any style or title. The only possible prefix at that time was Dominus (lord), which was regularly used by simple knights, and writs of summons were still issued to the lowest order of peers as knights (chevaliers) only. The style of baron was first introduced by Richard II. in 1387, when he created John de Beauchamp, by patent, Lord de Beauchamp and baron of Kidderminster, to make him "unum parium et baronum regni nostri." But it was not till 1433 that the next "baron" was created, Sir John Cornwall being then made baron of Fanhope. In spite, however, of these innovations, the former was only summoned to parliament by the style of "John Beauchamp of Kidderminster," and the latter by that of "John Cornwall, knight." Such creations became common under Henry VI., a transition period in peerage styles, but "Baron" could not evict "Sire," "Chevalier" and "Dominus." Patents of creation contained the formula "Lord A. (and) Baron of B.," but the grantee still styled himself "Lord" only, and it is an historically interesting fact that to this day a baron is addressed in correspondence, not by that style, but as "the Lord A.," although all peers under the rank of Duke are spoken of as "lords," while they are addressed in correspondence by their proper styles. To speak of "Baron A." or "Baron B." is an unhistorical and quite recent practice. When a barony, however, is vested in a lady it is now the recognized custom to speak of her as baroness, e.g. Baroness Berkeley.

The solemn investiture of barons created by patent was performed by the king himself, by enrobing the peer in the scarlet "robe of estate" during the reading of the patent, and this form continued till 13 Jac. I., when the lawyers declared that the delivery of the letters patent without ceremony was sufficient. The letters patent express the limits of inheritance of the barony. The usual limit is to the grantee and heirs male of his body, occasionally, in default of male issue, to a collateral male relative (as in the case of Lord Brougham, 1860) or (as in the case of Lord Basset, 1797, and Lord Burton, 1897) to the heirs-male of a daughter, and occasionally (as in the case of Lord Nelson, 1801) to the heirs-male of a sister. Sometimes also (as in the case of the barony of Rayleigh, 1821) the dignity is bestowed upon a lady with remainder to the heirs-male of her body. The coronation robes of a baron are the same as those of an earl, except that he has only two rows of spots on each shoulder; and, in like manner, his parliamentary robes have but two guards of white fur, with rows of gold lace; but in other respects they are the same as those of other peers. King Charles II. granted to the barons a coronet, having six large pearls set at equal distances on the chaplet. A baron's cap is the same as a viscount's. His style is "Right Honourable"; and he is addressed by the king or queen, "Right Trusty and Well-beloved." His children are by courtesy entitled to the prefix "The Honourable."

Barons of the Exchequer were formerly six judges (a chief baron and five puisne barons) to whom the administration of justice was committed in causes betwixt the king and his subjects relative to matters of revenue. Selden, in his *Titles of Honour*, conjectures that they were originally chosen from among the barons of the kingdom, and hence their name; but it would probably be more exact to say that they were officers of a branch of the king's *Curia*, which was theoretically composed of his "barons." The title has become obsolete since 1875, when the court of exchequer was merged in the High Court of Judicature.

Barons of the Cinque Ports (originally Hastings, Dover, Hythe, Romney and Sandwich) were at first the whole body of their freemen, who were so spoken of in royal charters. But the style was afterwards restricted to their mayors, jurats, and (prior to 1831) members of the House of Commons elected by the Cinque Ports, two for each port. Their right to the title is recognized in many old statutes, but in 1606 the use of the term in a message from the Lower House drew forth a protest from the peers, that "they would never acknowledge any man that sitteth in the Lower House to the right or title of a baron of parliament" (Lords' Journals). It was the ancient privilege of these "barons" to bear a canopy over the sovereign at his or her coronation and retain it as

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their perquisite. They petitioned as "barons of the Cinque Ports" to attend the coronation of Edward VII., and a deputation was allowed to do so.

Baron and Feme, in English law, is a phrase used for husband and wife, in relation to each other, who are accounted as one person. Hence, by the old law of evidence, the one party was excluded from giving evidence for or against the other in civil questions, and a relic of this is still preserved in the criminal law.

Baron and Feme, in heraldry, is the term used when the coats-of-arms of a man and his wife are borne per pale in the same escutcheon, the man's being always on the dexter side, and the woman's on the sinister. But in this case the woman is supposed not to be an heiress, for then her coat must be borne by the husband on an escutcheon of pretence. (See Heraldry.)

The foreign title of baron is occasionally borne by English subjects, but confers no precedence in the United Kingdom. It may be Russian, *e.g.* Baron Dimsdale (1762); German, *e.g.* Baron Stockmar, Baron Halkett (Hanoverian); Austrian, *e.g.* Baron Rothschild (1822), Baron de Worms; Italian, *e.g.* Baron Heath; French, *e.g.* Baron de Teissier; French-Canadian, *e.g.* Baron de Longueil (1700); Dutch, *e.g.* Baron Mackay (Lord Reay).

(J. H. R.)

The Foreign Title.—On the continent of Europe the title baron, though the same in its origin, has come, owing to a variety of causes, to imply a rank and status very different from its connotation in the United Kingdom, and again varies considerably in different countries. Originally baro meant no more than "man," and is so used in the Salic and other "barbarian" laws; e.g. Si quis mortaudit barum vel feminam, &c. (Lex Aleman. tit. 76). In this way, too, it was long preserved in the sense of "husband," as in the Assize of Jerusalem (MSS. cap. 98): Si l'on appelle aucune chose femme qui aura baron, et il la veut deffendre, il la peut deffendre de son cors, &c. Gradually the word seems to have come to mean a "strong or powerful man," and thus generally "a magnate." Finally, in France in the 12th century the general expression barones was introduced in a restricted sense, as applied properly to all lords possessing an important fief, subject to the rule of primogeniture and thus not liable to be divided up, and held of one overlord alone. Sometimes it included ecclesiastical lordships of the first rank. In the 13th century the Register of King Philip Augustus places the barones regis Francie next to the dukes and counts holding in chief, the title being limited to vassals of the second rank. Towards the end of the century the title had come to mean that its bearer held his principal fief direct from the crown, and was therefore more important than that of count, since many counts were only mediate vassals. Thus the kings in granting a duchy or countship as an apanage to their brothers or sons used the phrase in comitatum et baroniam. From this period, however, the title tends to sink in comparative importance. When, in the 14th century, the feudal hierarchy was completed and stereotyped, the barons are ranked not only below counts, but below viscounts, though in power and possessions many barons were superior to many counts. In any case, until the 17th century, the title of baron could only be borne by the holder of a territorial barony; and it was Louis XIV. who first cheapened the title in France by creating numerous barons by royal letters. This entire dissociation of the title from the idea of feudal rights and obligations was completed by Napoleon's decree of March 1, 1808, reviving the ancient titles. By this instrument the title of baron was to be borne ex officio by a number of high officials, e.g. ministers, senators, councillors of state, archbishops and bishops. It was given to the 37 mayors who attended the coronation, and could be claimed by any mayor who had served to the emperor's satisfaction for ten years, and by any member of an electoral college who had attended three sessions. The title was made to descend in order of primogeniture to legitimate or adopted sons and to the nephews of bishops, the sole condition being that proof must be presented of an actual income of 15,000 fr., of which one-third should descend with the title. The creation of barons was continued by Louis XVIII., Charles X. and Louis Philippe, and, suspended at the revolution of 1848, was revived again on a generous scale by Napoleon III. The tolerant attitude of the Third Republic towards titles, which it does not officially recognize, has increased the confusion by facilitating the assumption of the title on very slender grounds of right. The result has been that in France the title of Baron, unless borne by the recognized representative of a historic name, not only involves no political status, but confers also but very slight social distinction.

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The same is true, mutatis mutandis, of most other European countries, and notably of Italy. In Austria and Germany the case is somewhat different. Though in Latin documents of the middle ages the term barones for liberi domini was used, it was not until the 17th century that the word Baron, perhaps under the influence of the court of Versailles, began to be used as the equivalent of the old German Freiherr, or free lord of the Empire. The style Freiherr (liber dominus) implied originally a dynastic status, and many Freiherren held countships without taking the title of count. When the more important of them styled themselves counts, the Freiherren sank into an inferior class of nobility. The practice of conferring the title Freiherr by imperial letters was begun in the 16th century by Charles V., was assumed on the ground of special imperial concessions by many of the princes of the Empire, and is now exercised by all the German sovereigns. Though the practice of all the children taking the title of their father has tended to make that of Baron comparatively very common, and has dissociated it from all idea of territorial possession, it still implies considerable social status and privilege in countries where a sharp line is drawn between the caste of "nobles" and the common herd, whom no wealth or intellectual eminence can place on the same social level with the poorest Adeliger. In Japan the title baron (Dan) is the lowest of the five titles of nobility introduced in 1885, on the European model. It was given to the least important class of territorial nobles, but is also bestowed as a title of honour

without reference to territorial possession.

See du Cange, *Glossarium*, s. "Baro" (ed. Niort, 1883); John Selden, *Titles of Honor*, p. 353 (ed. 1672); Achille Luchaire, *Manuel des institutions françaises* (Paris, 1892); Maurice Prou, art. "Baron" in *La Grande Encyclopédie*.

(W. A. P.)

BARONET. Although the origin of this title has been the subject of learned speculation, it is not known for certain why it was selected as that of "a new Dignitie between Barons and Knights" created by James I. The object of its institution was to raise money for the crown, as was also done by the sale of peerage dignities under this sovereign. But the money was professedly devoted to the support of troops in Ulster, that is, each grantee was to be liable for the pay of thirty men, at 8d. a day for three years. This amounted to £1095, which was the sum paid for the honour. When it was instituted, in May 1611, the king, to keep the baronetage select, covenanted that he would not create more than two hundred, and that only those who had £1000 a year in landed estate and whose paternal grandfathers had borne arms should receive the honour. But these qualifications were before long abandoned. As an inducement to apply for it, it was made to confer the prefix of "Sir" and "Lady" (or "Dame"), and was assigned precedence above knights, though below the younger sons of barons. Eight years later (30th of September 1619), the baronetage of Ireland was instituted, the king pledging himself not to create more than a hundred baronets. Meanwhile, questions had arisen as to the exact precedence of the baronets, and James by royal decree (28th of May 1612) had announced that it was his intention to rank them below the younger sons of barons. As this had the effect of stopping applications for the honour, James issued a fresh commission (18th of November 1614) to encourage them, and finally, as "the Kinges wants might be much relieved out of the vanities and ambition of the gentrie" (in Chamberlain's words), he granted, in 1616, the further privilege that the heirs apparent of baronets should be knighted on coming of age.

The baronetage of Nova Scotia was devised in 1624 as a means of promoting the "plantation" of that province, and James announced his intention of creating a hundred baronets, each of whom was to support six colonists for two years (or pay 2000 marks in lieu thereof) and also to pay 1000 marks to Sir William Alexander (afterwards earl of Stirling), to whom the province had been granted by charter in 1621. For this he was to receive a "free barony" of 16,000 acres in Nova Scotia, and to become a baronet of "his Hienes Kingdom of Scotland." James dying at this point, Charles I. carried out the scheme, creating the first Scottish baronet on the 28th of May 1625, covenanting in the creation charter that the baronets "of Scotland or of Nova Scotia" should never exceed a hundred and fifty in number, that their heirs apparent should be knighted on coming of age, and that no one should receive the honour who had not fulfilled the conditions, viz. paid 3000 marks (£166, 13s. 4d.) towards the plantation of the colony. Four years later (17th of November 1629) the king wrote to "the contractors for baronets," recognizing that they had advanced large sums to Sir William Alexander for the plantation on the security of the payments to be made by future baronets, and empowering them to offer a further inducement to applicants; and on the same day he granted to all Nova Scotia baronets the right to wear about their necks, suspended by an orange tawny ribbon, a badge bearing an azure saltire with a crowned inescutcheon of the arms of Scotland and the motto "Fax mentis honestae gloria." As the required number, however, could not be completed, Charles announced in 1633 that English and Irish gentlemen might receive the honour, and in 1634 they began to do so. Yet even so, he was only able to create a few more than a hundred and twenty in all. In 1638 the creation ceased to carry with it the grant of lands in Nova Scotia, and on the union with England (1707) the Scottish creations ceased, English and Scotsmen alike receiving thenceforth baronetcies of Great Britain.

It is a matter of dispute whether James I. had kept faith with the baronets of England as to limiting their number; but his son soon rejected the restriction freely. Creations became one of his devices for raising money; blank patents were hawked about, and in 1641 Nicholas wrote that baronetcies were to be had for £400 or even for £350; a patent was offered about this time to Mr Wrottesley of Wrottesley for £300. On the other hand, the honour appears to have been bestowed for nothing on some ardent royalists when the great struggle began.

Cromwell created a few baronets, but at the Restoration the honour was bestowed so lavishly that a letter to Sir Richard Leveson (3rd of June 1660) describes it as "too common," and offers to procure it for any one in return for £300 or £400. Sir William Wiseman, however, is said to have given £500.

The history of the baronetage was uneventful till 1783, when in consequence of the wrongful assumption of baronetcies, an old and then increasing evil, a royal warrant was issued (6th of December) directing that no one should be recognized as a baronet in official documents till he had proved his right to the dignity, and also that those created in future must register their arms and pedigree at the Heralds' College. In consequence of the opposition of the baronets themselves, the first of these two regulations was rescinded and the evil remained unabated. Since the union with Ireland (1800) baronets have been created, not as of Great Britain or of Ireland, but as of the United Kingdom.

In 1834 a movement was initiated by Mr Richard Broun (whose father had assumed a Nova Scotia baronetcy some years before), to obtain certain privileges for the order, but on the advice of the Heralds' College, the request was refused. A further petition, for permission to all baronets to wear a badge, as did those of Nova Scotia, met with the same fate in 1836. Meanwhile George

IV. had revoked (19th of December 1827), as to all future creations the right of baronets' eldest sons to claim knighthood. Mr Broun claimed it as an heir apparent in 1836, and on finally meeting with refusal, publicly assumed the honour in 1842, a foolish and futile act. In 1854 Sir J. Kingston James was knighted as a baronet's son, and Sir Ludlow Cotter similarly in 1874, on his coming of age; but when Sir Claude de Crespigny's son applied for the honour (17th of May 1895), his application was refused, on the ground that the lord chancellor did not consider the clause in the patent (1805) valid. The reason for this decision appears to be unknown.

Mr Broun's subsequent connexion with a scheme for reviving the territorial claims of the Nova Scotia baronets as part of a colonizing scheme need not be discussed here. A fresh agitation was aroused in 1897 by an order giving the sons of life peers precedence over baronets, some of whom formed themselves, in 1898, into "the Honourable Society of the Baronetage" for the maintenance of its privileges. But a royal warrant was issued on the 15th of August 1898, confirming the precedence complained of as an infringement of their rights. The above body, however, has continued in existence as the "Standing Council of the Baronetage," and succeeded in obtaining invitations for some representatives of the order to the coronation of King Edward VII. It has been sought to obtain badges or other distinctions for baronets and also to purge the order of wrongful assumptions, an evil to which the baronetage of Nova Scotia is peculiarly exposed, owing to the dignity being descendible to collateral heirs male of the grantee as well as to those of his body. A departmental committee at the home office was appointed in 1906 to consider the question of such assumptions and the best means of stopping them.

All baronets are entitled to display in their coat of arms, either on a canton or on an inescutcheon, the red hand of Ulster, save those of Nova Scotia, who display, instead of it, the saltire of that province. The precedency of baronets of Nova Scotia and of Ireland in relation to those of England was left undetermined by the Acts of Union, and appears to be still a moot point with heralds. The premier baronet of England is Sir Hickman Bacon, whose ancestor was the first to receive the honour in 1611.

See Pixley's *History of the Baronetage*; Playfair's "Baronetage" (in *British Family Antiquity*, vols. vi.-ix.); Foster's *Baronetage*; G. E. Cokayne's *Complete Baronetage*; Nichols, "The Dignity of Baronet" (in *Herald and Genealogist*, vol. iii.)

(J. H. R.)

BARONIUS, CAESAR (1538-1607), Italian cardinal and ecclesiastical historian, was born at Sora, and was educated at Veroli and Naples. At Rome he joined the Oratory in 1557 under St Philip Neri (q.v.) and succeeded him as superior in 1593. Clement VIII., whose confessor he was, made him cardinal in 1596 and librarian of the Vatican. At subsequent conclaves he was twice nearly elected pope, but on each occasion was opposed by Spain on account of his work On the Monarchy of Sicily, in which he supported the papal claims against those of the Spanish government. Baronius is best known by his Annales Ecclesiastici, undertaken by the order of St Philip as an answer to the Magdeburg Centuries. After nearly thirty years of lecturing on the history of the Church at the Vallicella and being trained by St Philip as a great man for a great work, he began to write, and produced twelve folios (1588-1607). In the Annales he treats history in strict chronological order and keeps theology in the background. In spite of many errors, especially in Greek history, in which he had to depend upon secondhand information, the work of Baronius stands as an honest attempt to write history, marked with a sincere love of truth. Sarpi, in urging Casaubon to write against Baronius, warns him never to charge or suspect him of bad faith, for no one who knew him could accuse him of disloyalty to truth. Baronius makes use of the words of St Augustine: "I shall love with a special love the man who most rigidly and severely corrects my errors." He also undertook a new edition to the Roman martyrology (1586), which he purified of many inaccuracies.

His *Annales*, which end in 1198, were continued by Rinaldi (9 vols., 1676-1677); by Laderchi (3 vols., 1728-1737); and by Theiner (3 vols., 1856). The most useful edition is that of Mansi (38 vols., Lucca, 1738-1759), giving Pagi's corrections at the foot of each page.

(E. Tn.)

BARONY, the domain of a baron (q.v.). In Ireland counties are divided into "baronies," which are equivalent to the "hundreds" (q.v.) in England, and seem to have been formed out of the territories of the Irish chiefs, as each submitted to English rule (General Report of the Census of England, iv. 181, 1873). In Scotland the term is applied to any large freehold estate even when held by a commoner. Barony also denotes the rank or dignity of a baron, and the feudal tenure "by barony."

BAROQUE, a technical term, chiefly applicable to architecture, furniture and household decoration. Apparently of Spanish origin—a *barrueco* is a large, irregularly-shaped pearl—the word was for a time confined to the craft of the jeweller. It indicates the more extravagant fashions of design that were common in the first half of the 18th century, chiefly in Italy and France, in which everything is fantastic, grotesque, florid or incongruous—irregular shapes, meaningless forms, an utter lack of restraint and simplicity. The word suggests much the same order of ideas as rococo.

BAROSS, GABOR (1848-1892), Hungarian statesman, was born at Trencsén on the 6th of July 1848, and educated at Esztergom. He was for a time one of the professors there under Cardinal Kolos Vaszary. After acquiring considerable local reputation as chief notary of his county, he

[v.03 p.0424]

entered parliament in 1875. He at once attached himself to Kálmán Tisza and remained faithful to his chief even after the Bosnian occupation had alienated so many of the supporters of the prime minister. It was he who drew up the reply to the malcontents on this occasion, for the first time demonstrating his many-sided ability and his genius for sustained hard work. But it was in the field of economics that he principally achieved his fame. In 1883 he was appointed secretary to the ministry of ways and communications. Baross, who had prepared himself for quite another career, and had only become acquainted with the civilized West at the time of the Composition of 1867, mastered, in an incredibly short time, the details of this difficult department. His zeal, conscientiousness and energy were so universally recognized, that on the retirement of Gábor Kemény, in 1886, he was appointed minister of ways and communications. He devoted himself especially to the development of the national railways, and the gigantic network of the Austro-Hungarian railway system and its unification is mainly his work. But his most original creation in this respect was the zone system, which immensely facilitated and cheapened the circulation of all wares and produce, and brought the remotest districts into direct communication with the central point at Budapest. The amalgamation of the ministry of commerce with the ministry of ways in 1889 further enabled Baross to realize his great idea of making the trade of Hungary independent of foreign influences, of increasing the commercial productiveness of the kingdom and of gaining every possible advantage for her export trade by a revision of tolls. This patriotic policy provoked loud protests both from Austria and Germany at the conference of Vienna in 1890, and Baross was obliged somewhat to modify his system. This was by no means the only instance in which his commercial policy was attacked and even hampered by foreign courts. But wherever he was allowed a free hand he introduced epoch-making reforms in all the branches of his department, including posts, telegraphs, &c. A man of such strength of character was not to be turned from his course by any amount of opposition, and he rather enjoyed to be alluded to as "the iron-handed minister." The crowning point of his railway policy was the regulation of the Danube at the hitherto impassable Iron-Gates Rapids by the construction of canals, which opened up the eastern trade to Hungary and was an event of international importance. It was while inspecting his work there in March 1892 that he caught a chill, from which he died on the 8th of May. The day of his burial was a day of national mourning, and rightly so, for Baross had dedicated his whole time and genius to the promotion of his country's prosperity.

See László Petrovics, Biography of Gabriel Baross (Hung. Eperies, 1892).

(R. N. B.)

BAROTAC NUEVO, a town of the province of Iloílo, Panay, Philippine Islands, near the Jalaur river, above its mouth on the S.E. coast, and about 15 m. N.E. of Iloílo, the capital. Pop. (1903) 9904; in 1903 after the census had been taken the neighbouring town of Dumangas (pop. 12,428) was annexed to Barotac Nuevo. The town lies in a fertile plain and deals in rice, trepang and pina. Here, in what was formerly Dumangas, are a fine church and convent, built of iron, pressed brick and marble. Dumangas was destroyed by fire in June 1900, during a fight with insurgents, but its rebuilding was begun in May 1901.

BAROTSE, BAROTSELAND, a people and country of South Central Africa. The greater part of the country is a British protectorate, forming part of Rhodesia. The Barotse are the paramount tribe in the region of the Upper Zambezi basin, but by popular usage the name is also applied to contiguous subject tribes, Barotseland being the country over which the Barotse paramount chief exercises authority. The present article treats (1) of the people, (2) of the country, (3) of the establishment of the British protectorate and of subsequent developments.

[v.03 p.0425] 1. The Barotse.—These people, originally known as Aälui, have occupied the extensive plain through which the Zambezi passes from 14° 35′ S. to 16° 25′ S. throughout the reigns of twentytwo successive paramount chiefs and therefore approximately since the commencement of the 17th century. Previously, for an indefinite period, they dwelt on the Kabompo river, 200 m. to the N.E. of their present country, and here the descendants of a section of the tribe which did not migrate still remain, under the name Balokwakwa (men of the ambuscade), formerly known as Aälukolui. That the Barotse at a still more remote period emigrated from the far north-east is indicated by vague tradition as well as by a certain similarity in type and language to some tribes living in that direction, though the fact that natives from Mashonaland can understand those at Lialui (the Barotse capital) has led to the assumption by some writers that the Barotse are an offshoot of the Mashona. The variety in type among the Mashona and the homogeneity of the Barotse would rather point to an opposite conclusion.

> Early in the 19th century a section of the Basuto tribe known as Makololo trekked from the south of what is now the Orange River Colony and fought their way through Bechuanaland and the Kalahari to the land of the Barotse, whom they ultimately subdued. Their chief, Sebituane, who as an administrator and general was far in advance of his compeers, established the rule of his house for some forty years, until about 1865 an organized rebellion of the Barotse led to the almost complete extinction of this Makololo oligarchy and the reinstatement of the original dynasty. It was the Makololo who gave the Barotse their present name (Rotse, plain-Burotse, country of the plain—Murotse, man of the plain—Marotse, people of the plain, the latter being inaccurately rendered Barotse, Ba being the equivalent of Ma in certain other languages).

> The Barotse proper are comparatively few in number, but as is inferred from the fact that for many generations they have held in sway a country two and a half times the size of Great Britain, they are the intellectual and physical superiors of the vast majority of the negro races of Africa. Very black, tall in stature, deep in chest and comparatively speaking refined in feature, a Barotse

is readily distinguishable amidst a mixed group of natives. Being numerically small they form an oligarchy in which, with few exceptions, each man holds rank in a chieftainship of which there are three grades. Next to the chiefs rank their descendants who have not themselves acquired chief's rank and hold an intermediate position as freeborn; all others, whether members of the subject-tribes or prisoners of war, being, up to 1906, mere slaves. This class was also graded. Slaves might own slaves who in their turn might own slaves, the highest grade always being directly responsible to some Barotse chief. As a reward of gallantry or ability the paramount chief occasionally conferred chief's rank on individuals not of Barotse birth, and these ipso facto assumed the name and privileges of the Barotse. It was a counterpart of the feudal system of Europe in which every grade from king to serf found a place. In 1906 the paramount chief, by proclamation, abolished the state of slavery, an act which, however, left untouched the predominant position of the Barotse and their rights to chieftainship. The paramount chief shares with a queen (Mokwai) his authority and prerogatives. The Mokwai is not the wife but the eldest sister of the ruling chief. With his death her privileges lapse. Theoretically, these co-rulers are equal, neither may promulgate a national decree without the assent of the other, but each has a capital town, councillors and absolute authority in a province, the two having joint authority over all other provinces. In their code of laws the Barotse show an advance on the standard of probably any other African negro state. By right, an accused chief is tried by his peers, each of whom in rotation from junior to senior gives his verdict, after which the president reports the finding of the court to the paramount chief, who passes sentence. As to their religious beliefs the Barotse imagine the sun to be the embodiment of a great god whose sole care is for the amelioration of man. Him they worship, though more pains are taken to appease evil spirits, in whose existence they also believe, to whom every evil to which man is heir is attributed. The spirits of ancestors—especially of deceased chiefs—are also objects of worship. Christianity, of a Protestant evangelical type, was first introduced into the country in 1884 by François Coillard and has made some progress among the people, among the converts being Letia, eldest son and heir of Lewanika, the paramount chief.

- 2. Barotseland.—This term includes, in the sense of the country in which the authority of the paramount Barotse chief is acknowledged, not only the lands of the Barotse proper, but the territory of fifteen contiguous and subject tribes. This vast territory extends approximately from the Kwito river in the west to the Kafue river in the east, and from the Congo-Zambezi watershed in the north to the Linyante or Kwando river and Zambezi in the south, and may be divided into three groups:—
- (a) Central provinces directly administered by the paramount chief from the capital Lialui (a town on the Zambezi), by the Mokwai from Nalolo, and by two chiefs of the blood from Sesheke;
- (b) Outlying provinces over which, in the absence of a central local system of government, Barotse chiefs administer districts under the direction of the paramount chief; and
- (c) Tribes over which the local chiefs are permitted to retain their position subject to the payment of annual tribute and to their doing homage in person at Lialui when called upon to do so.

With the publication of the king of Italy's award in 1905 in the Anglo-Portuguese Barotse Boundary dispute (see below), the term Barotseland may be said to have acquired a second meaning. By this award the western and part of the northern section of Barotseland as described above were declared to be outside the dominion of the paramount chief and therefore not in the British sphere of influence, while tribal boundaries were complicated by the introduction of a longitudinal and latitudinal frontier. Though this award altered the political boundaries, ethnologically Barotseland remains much as above described. The area of the country under British protection is about 182,000 sq. m.

Excluding the ridge of high ground running east and west which, culminating at a height of 5000 ft., forms the Congo-Zambezi water-parting, the extreme east (Batoka) and the district in the immediate vicinity of the Victoria Falls (q.v.) throughout which, with local variations, a red laterite clay predominates, the main physical features of Barotseland may be described as a series of heavy white sand undulations covered with subtropical forest vegetation. These are intersected by alluvium-charged valleys through which streams and rivers flow inwards towards the central basin of the Upper Zambezi. There is evidence that this has at one time been the site of a large lake. These valleys, which towards the close of the wet season become inundated, afford rich cattle pasture, the succulence of which prevents cattle losing condition towards the end of the dry season, as is the case in many parts of Africa. There seems to be little or no indication of mineral wealth in the white sand area, but in the north and east there is not only every prospect of a great agricultural and pastoral future but also of considerable mining development. Though basalt predominates in the neighbourhood of the Victoria Falls and large fields of granite crop up on the Batoka plateau and elsewhere, there is every indication of the existence of useful minerals in these districts. Gold, copper, tin, lead, zinc and iron have been discovered.

Much of the area of Barotseland is within the healthy zone, the healthiest districts being the Batoka and Mashikolumbwe plateaus in the east with extreme altitudes of 4400 and 4150 ft. respectively, and the line of the Congo-Zambezi watershed which rises to 5000 ft. in many places. The Zambezi valley from the Victoria Falls (3000 ft.) to the Kabompo confluence (3500 ft.), though involving little or no risk to health to the traveller, cannot be considered suitable for white settlement. Taking into consideration the relative value of altitude to latitude, the plateauland of Barotseland compares very favourably with existing conditions elsewhere, being

[v.03 p.0426] several degrees more temperate than would be expected. Approximately the mean maximum and minimum temperatures stand at 80° and 55° F. respectively, with an extreme range of 100° to 35° and a mean annual temperature of 68° to 70°. The rainfall varies according to district from 22 to 32 in. a year and has shown extraordinary stability. Since 1884, the first year in which a record was taken by François Coillard, Barotseland has known no droughts, though South Africa has suffered periodically in this respect.

> The Zambezi, as would be expected, forms a definite boundary line in the distribution of many species of fauna and flora. In these respects, as well as from an ethnological standpoint, Barotseland essentially belongs not to South but to Central Africa. The great river has also served to prevent the spread from South Africa into Barotseland of such disastrous cattle diseases as tick fever and lung sickness.

> 3. The Establishment of British Suzerainty.—By the charter granted to the British South Africa Company in October 1889, the company was allowed to establish its rule in the regions north of the Middle Zambezi not included in the Portuguese dominions, and by a treaty of the 11th of June 1891 between Great Britain and Portugal it was declared that the Barotse kingdom was within the British sphere of influence. The dispute between the contracting powers as to what were the western limits of Barotseland was eventually referred to the arbitration of the king of Italy, who by his award of the 30th of May 1905, fixed the frontier at the Kwando river as far north as 22° E., then that meridian up to the 13° S., which parallel it follows as far east as 24° E., and then that meridian to the Belgian Congo frontier. In the meantime the British South Africa Company had entered into friendly relations with Lewanika (q.v.), the paramount chief of the Barotse, and an administrator was appointed on behalf of the company to reside in the country. A native police force under the command of a British officer was raised and magistrates and district commissioners appointed. In the internal affairs of the Barotse the company did not interfere, and the relations between the British and Barotse have been uniformly friendly. The pioneers of Western civilization were not, however, the agents of the Chartered Company, but missionaries. F. S. Arnot, an Englishman, spent two years in the country (1882-1884) and in 1884 a mission, fruitful of good results, was established by the Société des Missions Evangéliques de Paris. Its first agent was François Coillard (1834-1904), who had previously been engaged in mission work in Basutoland and who devoted the rest of his life to the Barotse. Though always an admirer of British institutions and anxious that the country should ultimately fall under British jurisdiction, Coillard in the interests of his mission was in the first instance anxious to delay the advent of white men into the country. It was contrary to his advice that Lewanika petitioned the "Great White Queen" to assume a protectorate over his dominions, but from the moment Great Britain assumed responsibility and the advance of European civilization became inevitable, all the influence acquired by Coillard's exceptional personal magnetism and singleness of purpose was used to prepare the way for the extension of British rule. Only those few pioneers who knew the Barotse under the old conditions can fully realise what civilization and England owe to the cooperation of this high-minded Frenchman.

> Under the Chartered Company's rule considerable progress has been made in the development of the resources of the country, especially in opening up the mining districts in the north. The seat of the administration, Kalomo, is on the "Cape to Cairo" railway, about midway between the Zambezi and Kafue rivers. The railway reached the Broken Hill copper mines, 110 m. N. of the Kafue in 1906, and the Belgian Congo frontier in 1910. From Lobito Bay in Portuguese West Africa a railway was being built in 1909 which would connect with the main line near the Congo frontier. This would not only supply Barotseland with a route to the sea alternative to the Beira and Cape Town lines, but while reducing the land route by many hundred miles would also supply a seaport outlet 1700 m. nearer England than Cape Town and thus create a new and more rapid mail route to southern Rhodesia and the Transvaal. The Zambezi also, with Kebrabasa as its one bar to navigation between Barotseland and the sea, will supply a cheap line of communication. (See Rhodesia.)

> See David Livingstone, Missionary Travels and Researches in South Africa (London, 1857); Major Serpa Pinto, How I crossed Africa (London, 1881); F. Coillard, On the Threshold of Central Africa (London, 1897); Major A. St H. Gibbons, Exploration and Hunting in Central Africa (London, 1898), Africa South to North through Marotseland (London, 1904); "Journeys in Marotseland," Geographical Journal, 1897; "Travels in the Upper Zambezi Basin," Geographical Journal, 1901; A. Bertrand, Aux pays des Barotse, haut Zambèze (Paris, 1898); Col. Colin Harding, In Remotest Barotseland, (London, 1905); C. W. Mackintosh, Coillard of the Zambesi (London, 1907), with a bibliography; L. Decle, Three Years in Savage Africa (London, 1898). Consult also the annual reports of the British South Africa Company, published in London.

(A. St H. G.)

BAROUCHE (Ger. barutsche, Span. barrocho, Ital. baroccio; from Lat. bi-rotus, double-wheeled), the name of a sort of carriage, with four wheels and a hood, arranged for two couples to sit inside facing one another.

BARQUISIMETO, a city of western Venezuela, capital of the state of Lara, on the Barquisimeto river, 101 m. by rail S.W. of Tucacas, its port on the Caribbean coast. Pop. (est. 1899) 40,000. It is built in a small, fertile valley of the Merida Cordilleras, 1985 ft. above sea-level, has a temperate, healthy climate with a mean annual temperature of 78° F., and is surrounded by a highly productive country from which are exported coffee, sugar, cacao and rum. It is also an important distributing centre for neighbouring districts. The city is the seat of a bishopric, is

regularly laid out and well built, and is well provided with educational and charitable institutions. Barquisimeto was founded in 1522 by Juan de Villegas, who was exploring the neighbourhood for gold, and it was first called Nueva Segovia after his native city. In 1807 its population had risen to 15,000, principally through its commercial importance, but on the 26th of March 1812 it was totally destroyed by an earthquake, and with it 1500 lives, including a part of the revolutionary forces occupying the town. It was soon rebuilt and is one of the few cities of Venezuela which have recovered from the ravages of the war of independence and subsequent disorders.

BARR, a town of Germany, in the imperial province of Alsace-Lorraine, on the Kirneck, 13 m. N. from Schlettstadt by rail. It has an Evangelical and a Roman Catholic church and considerable tanneries. There is an active trade in wine and timber. Pop. (1900) 5243.

BARRA, or Barray (Scand. *Baraey*, isle of the ocean), an island of the outer Hebrides, Inverness-shire, Scotland. Pop. (1901) 2362. It lies about 5 m. S.W. of South Uist, is 8 m. in length and from 2 to 4 m. in breadth, save at the sandy isthmus 2 m. below Scurrival Point, where it is only a few hundred yards broad. The rock formation is gneiss. The highest hill is Heaval (1260 ft.) and there are several small lochs. The chief village is Castlebay, at which the Glasgow steamer calls once a week. This place derives its name from the castle of Kishmul standing on a rock in the bay, which was once the stronghold of the M^cNeills of Barra, one of the oldest of Highland clans. There are remains of ancient chapels, Danish duns and Druidical circles on the island. There is communication by ferry with South Uist. The parish comprises a number of smaller islands and islets—among them Frida, Gighay, Hellisay, Flodda to the N.E., and Vatersay, Pabbay, Mingalay (pop. 135) and Berneray to the S.E.—and contains 4000 acres of arable land and 18,000 acres of meadow and hill pasture. The cod, ling and herring fisheries are important, and the coasts abound with shell-fish, especially cockles, for which it has always been famous. On Barra Head, the highest point of Berneray, and also the most southerly point of the outer Hebrides chain, is a lighthouse 680 ft. above high water.

BARRACKPUR, a town and magisterial subdivision of British India, in the district of Twenty-four Parganas, Bengal. The town is the largest cantonment in Lower Bengal, having accommodation for two batteries of artillery, the wing of a European regiment and two native battalions. Its name is said to be derived from the fact of troops having been stationed here since 1772. It is a station on the Eastern Bengal railway. Job Charnock, the founder of Calcutta, erected a bungalow and established a small bazaar here in 1689. The cantonment is situated on the left bank of the Hugli; it has also a large bazaar and several large tanks, and also a parade ground. To the south of the cantonment is situated the park, created by the taste and public spirit of Lord Wellesley. Within the park is situated the Government House, a noble building begun by Lord Minto, and enlarged into its present state by the marquess of Hastings. The park is beautifully laid out, and contains a small menagerie. Its most interesting feature is now Lady Canning's tomb. Barrackpur played an important part in the two Sepoy mutinies of 1824 and 1857, but the details of these belong to the general history of British rule in India. North Barrackpur had a population in 1901 of 12,600 and south Barrackpur of 19,307.

Barrackpur subdivision was formed in 1904. It contains an area of 190 sq. m., which, at the census of 1901, had a population of 206,311, a large proportion being workers in the mills on the left bank of the Hugli.

BARRACKS (derived through the French from the Late Lat. *barra*, a bar), the buildings used for the accommodation of military or naval forces, including the quarters for officers, warrant officers, non-commissioned officers and men, with their messes and recreation establishments, regimental offices, shops, stores, stables, vehicle sheds and other accessory buildings for military or domestic purposes. The term is usually applied to permanent structures of brick or stone used for the peace occupation of troops; but many hut barracks of corrugated iron lined with wood have been built, generally in connexion with a training ground for troops, and in these the accommodation given is somewhat less than in permanent barracks, and conditions more nearly approach those of a military encampment.

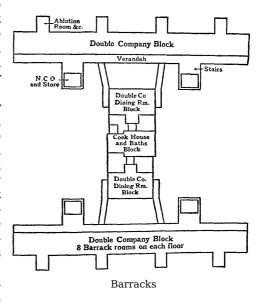
British System.—The accommodation to be given in British military barracks is scheduled in the Barrack Synopsis, which contains "statements of particulars, based upon decisions which have, from time to time, been laid down by authority, as regards the military buildings authorized for various units, and the accommodation and fittings to be provided in connexion therewith." Each item of ordinary accommodation is described in the synopsis, and the areas and cubic contents of rooms therein laid down form the basis of the designs for any new barrack buildings. Supplementary to the synopsis is a series of "Standard Plans," which illustrate how the accommodation may be conveniently arranged; the object of the issue of these plans is to put in convenient form the best points of previous designs, and to avoid the necessity of making an entirely fresh design for each building that is to be erected, by using the standard type modified to suit local conditions. External appearance is considered with regard to the materials to be used, and the position the buildings are to occupy; convenience of plan and sound sanitary construction being the principal objects rather than external effect, designs are usually simple, and depend for architectural effect more on the grouping and balance of the parts than on ornamentation such as would add to expense. The synopsis and standard plans are from time to time revised, and brought up to date as improvements suggest themselves, and increases in scale of accommodation are authorized, after due consideration of the financial effect; so that systematic evolution of barrack design is carried on.

Modern British Barracks.—A description of a modern barrack for a battalion of infantry will give

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an idea of the standard of accommodation which is now authorized, and to which older barracks are gradually remodelled as funds permit. The unmarried soldiers are quartered in barrackrooms usually planned to contain twelve men in each; this number forms a convenient division to suit the organization of the company, and is more popular with the men than the larger numbers which were formerly the rule in each barrack-room; there is a greater privacy, whilst the number is not too small to keep up the feeling of barrack-room comradeship which plays an important part in the soldier's training. The rooms give 600 cub. ft. of air per man, and have windows on each side: the beds are spaced between the windows so that only one bed comes in a corner, and not more than two between any two windows: inlet ventilators are fixed high up in the side walls, and an extract shaft warmed by the chimney flue keeps up a circulation of air through the room: the door is usually at one end of the room and the fireplace at the opposite end: over each man's bed is a locker and shelf where he keeps his kit, and his rifle stands near the head of his bed. Convenient of access from the door to the barrack-room is the ablution-room with basins and foot-bath; also disconnected by a lobby is a water-closet and urinal for night use, others for day use being provided in separate external blocks. Baths are usually grouped in a central bath-house adjacent to the cook-house, and have hot water laid on. For every two or four barrack-rooms, a small single room is provided for the occupation of the sergeant in charge, who is responsible for the safety of a small store, where men may leave their rifle and kit when going on furlough. Adjacent to the barrack blocks and next to the cook-house are arranged the dining-rooms where the men assemble for their meals; no food is now served in the barrack-rooms, and the air in them is thus kept much purer and fresher than under the old system. The dining-rooms are lofty and well ventilated, and are warmed by hot water; tables and forms are arranged so as to make the most of the space, and room is provided for all the men to dine simultaneously.

Next to the dining-room is the cook-house where the meals for a half battalion are cooked, and served direct to the dining-rooms on each side. Wash-up rooms are arranged off the serving-lobby with plate-racks and shelves for the storage of the crockery after it has been washed. The cooking apparatus is designed for economical use of coal fuel, and, if carefully used, consumes little more than ½ lb of coal per man per day. The cook-house is well lighted and ventilated by a top lantern; tables, dressers, and pastry slab are provided for preparing and serving the meals, and a sink for washing kitchen utensils. Under the kitchen block is a basement containing the boiler for heating the dining-rooms and another for the supply of hot water to baths and sinks, with in some cases also a hotair furnace for heating drying-rooms, for drying the men's clothing when they come in wet from a routemarch or field day. Not far from the barrack blocks is placed the recreation establishment or soldiers' club, where the rank and file may go for relaxation and amusement when off duty; this establishment has, on



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the ground floor, a large and lofty room with a stage at one end for lectures or entertainments, and at the other end is a supper bar, extending across the room, where mineral waters and other light refreshments are sold; tables are also arranged for suppers. A grocery shop is provided where the men and their families may purchase goods bought under regimental arrangements at wholesale prices, and sold without more profit than is necessary to keep the institution self-supporting. On the first floor are billiard and games room, reading-room and library, and writing-room. The manager's quarter and kitchen premises complete the establishment. Near the recreation establishment is the canteen, devoted solely to the sale of beer, and not permitted to vie in attractiveness with the recreation establishment. A bar is provided for the soldiers, a separate room for corporals, and a jug department for the supply of the families; this building also has a manager's quarter attached to it, and an office for the checking of accounts.

For the senior non-commissioned officers a sergeants' mess is provided, containing dining-room, reading-room and billiard-room, with kitchen premises and liquor store, which also has a jug department for the sergeants' families. The single non-commissioned officers have all their meals in this mess, and the married members also use it as a club. The warrant officers, and the proportion of non-commissioned officers and men who are on the married establishment, are provided with accommodation at some little distance from the men's barracks. In all recent schemes, on open sites, self-contained cottages have been built, and these are more popular than the older pattern of tenement buildings approached by common staircases or verandahs. The warrant officers are allowed a living-room, kitchen, and scullery, with three bedrooms and a bathroom. The married soldiers have a living-room, scullery, and one, two, or three bedrooms according to the size of their families. A laundry is provided adjacent to the married quarters, equipped with washing-troughs, wringer, drying-closet, and ironing-room; and the women are encouraged to use this in preference to doing washing in their cottages.

Officers' Quarters.—At a little distance from the men's barracks, and usually looking over the parade or cricket ground, is the officers' mess. This building has an entrance-hall with band alcove, where the band plays on guest nights; on one side of the hall is the mess-room (or dining-room), and on the other the anteroom (or reading-room), whilst the billiard-room and kitchen are kept to the back so that lantern lights can be arranged for. A mess office is provided, and all the

accessories required for the mess waiters' department, including pantry, plate-closet and cellarage, and for the kitchen or mess-man's department, with also a quarter for the mess-man. The officers' quarters are usually arranged in wings extending the frontage of the mess building, and in a storey over the mess itself. Each officer has a large room, part of which is partitioned off for a bedroom, and the field officers are allowed two rooms. The soldier servant, told off to each officer, has a small room allotted for cleaning purposes, and bathrooms, supplied with hot water from the mess kitchen, are centrally situated. A detached house, containing three sitting-rooms, seven bed- and dressing-rooms, bathroom, kitchen, servants' hall, and the usual accessories, is provided for the commanding officer: also a smaller house, having two sitting-rooms, four bedrooms, bath, kitchen, &c., for the quartermaster. Other regimental married officers are not provided for, and have to arrange to house themselves, a lodging allowance being usually granted.

Regimental Accessories.—Apart from the buildings providing accommodation, others are required for administrative and military purposes. These are the guard house and regimental offices, the small-arm ammunition store, the fire-engine house, the drill and gymnastic hall, and the medical inspection block with dispensary, where the sick are seen by a medical officer and either prescribed for or sent into hospital, as may be necessary. Stables are provided for the officers' and transport horses, and a vehicle shed and storehouse for the mobilization equipment. Stores are required for bread, meat, coal, clothing, and for musketry, signalling, and general small stores under the quartermaster's charge—also workshops for armourers, carpenters, plumbers, painters and glaziers, shoemakers, and tailors. Mention of the fives court, recreation ground and parade ground completes the description of a battalion barrack.

Cavalry Barracks.-The accommodation provided for cavalry is very similar to that already described for infantry. The barrack blocks are arranged to suit the organization of the regiment, and are placed so that the men can turn out readily and get to their horses. Detached buildings are provided for cavalry troop stables, one block for the horses of each troop. Formerly stables were often built for convenience with the barrack-rooms over them; but this system has been abandoned on sanitary grounds, to the benefit of both men and horses. Each horse is given 1500 cub. ft. of air space, the horses' heads are turned to the outer walls, and provision is made, by traversed air-ducts below the mangers, for fresh air to be supplied to the horses while lying down. Above the horses' heads are windows which are arranged to open inwards, being hinged at the bottom and fitted with hopper checks to avoid direct draught. Ridge ventilation and skylights are given, so that all parts of the stable are well lighted and airy.

Cast-iron mangers and hay-racks are provided, and the horses are separated by bails, with chains to manger brackets and heel posts; saddle brackets are fixed to the heel posts. Each stable has a troop store, where spare saddles and gear are kept; also an expense forage store, in which the day's ration, after issue in bulk from the forage barn, is kept until it is given out in feeds. The stables are paved with blue Staffordshire paving bricks, graded to a collecting channel carrying the drainage well clear of the building, before it is taken into a gully.

The space between the blocks of stables is paved with cement concrete to form a yard, and horsetroughs, litter-sheds and dung-pits are provided. Officers' stables are built in separate blocks, and usually have only one row of stalls; the stalls are divided by partitions, and separate saddlerooms are provided. Stalls and loose boxes in infirmary stables give 2000 cub. ft. of air space per horse and are placed at some distance from the troop stables in a separate enclosure. A forge and shoeing shed is provided in a detached block near the troop stables. A forage barn and granary is usually built to hold a fortnight's supply, and a chaff-cutter driven by horse power is fixed close by. Cavalry regiments each have a large covered riding school, and a number of open *manèges*, for exercise and riding instruction.

Artillery, &c.—The accommodation provided for horse and field artillery is arranged to suit their organization in batteries and brigades, and is generally similar to that already described, with the addition of vehicle sheds for guns and ammunition wagons, and special shops for wheelers and saddlers. Accommodation for other units follows the general lines already laid down, but has to be arranged to suit the particular organization and requirements of each unit.

Garrison Accessories.—In every large military station in addition to the regimental buildings which have been described, a number of buildings and works are required for the service of the garrison generally. Military hospitals are established at home and abroad for the treatment of sick officers and soldiers as well as their wives and families. Military hospitals are classified as follows:-First-grade hospitals are large central hospitals serving important districts. These hospitals are complete in themselves and fully equipped for the carrying out of operations of all kinds; they generally contain wards for officers, and may have attached to them separate isolation hospitals for the treatment of infectious cases, and military families' hospitals for women and children. Second-grade hospitals are smaller in size and less fully equipped, but are capable of acting independently and have operation rooms. Third-grade hospitals or reception stations are required for small stations principally, to act as feeders to the large hospitals, and to deal with accident and non-transportable cases. The principles of construction of military hospitals do not differ materially from the best modern civil practice; all are now built on the pavilion system with connecting corridors arranged so as to interfere as little as possible with the free circulation of air between the blocks. The site is carefully selected and enclosed with [v.03 p.0429] railings. The administration block is centrally placed, with ward blocks on each side, and accessory buildings placed where most convenient; the isolation wards are in a retired position and divided off from the hospital enclosure. Ward blocks usually have two storeys, and the

ordinary large wards provide 1200 cub. ft. of air space per patient. A due proportion of special case and other special wards is arranged in which the space per patient is greater or less, as necessary.

Army schools are built to give slightly more liberal accommodation than is laid down as the minimum by the Board of Education, but the principles of planning are much the same as in civil elementary schools. Schools are usually placed between the married quarters and the barracks, so as to serve both for the instruction of the men, when working for educational certificates, and for the education of the children of the married soldiers. Garrison churches are built when arrangements for the troops to attend divine service at neighbouring places of worship cannot well be made. Only two *military prisons* now remain, viz. Dover and Curragh, and these are for soldiers discharged from the service with ignominy. For ordinary sentences detention barracks and branch detention barracks are attached to the military commands and districts: these are constructed in accordance with the home office regulations; but crime in the army fortunately continues to decrease, and little accommodation has recently been added. Barrack expense stores for the issue of bedding, utensils and other stores for which the troops depend upon the Army Service Corps, are necessary in all barracks; and in large stations a supply depot for the issue of provisions, with abattoir and bakery attached to it, may be necessary. An engineer office with building yard and workshops to deal with the ordinary duties in connexion with the upkeep of War Department property is required at every station, and for large stations such as Aldershot, it may be necessary to undertake special water supply schemes, works for disposal of sewage, and for the supply of electricity or gas for lighting the barracks. The system of roads, pipes and mains within the barracks are in all cases maintained by the Royal Engineers, as well as the buildings themselves. District and brigade offices are necessary for the administration of large units, and quarters for the general officer commanding and the headquarters staff may sometimes be required.

Location of Barracks.—The selection of a healthy site for a barrack building or new military station is a matter of great importance. In the earlier days of barrack construction, barracks were, for political reasons, usually built in large towns, where troops would be at hand for putting down disturbances, and cramped and inconvenient buildings of many storeys, were erected on a small piece of ground often surrounded by the worst slums of the city; such, for example, were the Ship Street barracks in Dublin, and the cavalry barracks at Hulme, Manchester. Worse still were cases where an existing building, such as the Linen Hall in Dublin, was purchased, and converted into barracks with little regard for the convenience of the occupants, and a total disregard for the need of a free circulation of pure air in and about the buildings, which is the first condition of health. In the present day, except in a few cases where strong local influence is allowed to prevail to retain troops in towns, where their presence, and perhaps the money they spend, are appreciated for patriotic or other motives, every opportunity is taken to move troops from the vicinity of crowded towns, and quarter them in barracks or hutments built in the open country. Due regard can then be given to sanitary location, and military training can more effectively be carried out. With improvements in communication by rail, road and telegraph, support to the civil power in case of disturbance can always be afforded in good time, without permanently stationing troops in the actual locality where their assistance may be needed. It has been recognized ever since the Crimean War, that the leading principle of barrack policy must, in the future, be to facilitate in peace time the training of the army for war, and that this can only be done by quartering troops in large bodies, including all branches of the service, in positions where they have space for training, gun and rifle practice, and manœuvring. The camps at Aldershot, Colchester, Shorncliffe and Curragh were accordingly started between 1856 and 1860, and the same policy has since been continued by the acquisition of Strensall Common, near York, Kilworth domain, near Fermoy, the lease of a portion of Dartmoor and a large area at Glen Imaal in Co. Wicklow, and the purchase of the Stobs estate in Scotland and of a large part of Salisbury Plain.

Barrack Construction.—The history of barrack construction in Great Britain is an interesting study, but can only be touched on briefly. As long as operations in the field were carried on by troops levied especially for the war in hand, no barracks apart from fortifications were required, except those for the royal bodyguard; and even after the standing army exceeded those limits, the necessity for additional barracks was often avoided by having recourse to the device of billeting, i.e. quartering the soldiers on the populations of the towns where they were posted. This, however, was a device burdensome to the people, subversive of discipline, and prejudicial to military efficiency in many ways, while it exposed the scattered soldiers to many temptations to disloyalty. Hence barracks were gradually provided, at first in places where such an arrangement was most necessary owing to the paucity of the population, or where concentration of troops was most important, owing to the disaffection of some of the inhabitants. The earliest barracks of which there is any record as regards England, were those for the foot guards, erected in 1660. Among the earliest of those still existing are the Royal Barracks at Dublin, dating from 1700, and during the 18th century barracks were built in several parts of Ireland; but in England it was at the end of the 18th and beginning of the 19th century that most of the earlier barracks were constructed. So long as barracks were mainly in connexion with fortresses their construction naturally fell to the duty of the King's Engineers, afterwards the Corps of Engineers, working under the master-general of the ordnance. About 1796, however, a special civil department was formed under the commissioners for the affairs of barracks, to deal with barracks apart from fortifications. In 1816 we find a warrant appointing a civilian comptroller of the barrack department to deal with the erection and upkeep of barracks and barrack hospitals not within fortified places. This warrant gives one of the earliest records of the nature of

accommodation provided, and a few extracts from it are worth notice. No definite regulations as to cubic or floor space per man are laid down; but in the infantry, twelve men, and in the cavalry, eight men are allotted to one room. "Bedsteads or berths" are allowed, "a single one to each man, or a double one to two men," or "hammocks where necessary." The married soldier's wife is barely recognized, as shown by the following extract:-"The Comptroller of the barrack department may, if he sees fit, and when it in no shape interferes with or straitens the accommodation of the men, permit (as an occasional indulgence, and as tending to promote cleanliness, and the convenience of the soldier) four married women per troop or company of sixty men, and six per troop or company of a hundred men, to be resident within the barracks; but no one article shall on this account be furnished by the barrack-masters, upon any consideration whatever. And if the barrack-masters perceive that any mischief, or damage, arises from such indulgence, the commanding officer shall, on their representation, displace such women. Nor shall any dogs be suffered to be kept in the rooms of any barrack or hospital." Another regulation says: "Where kitchens are provided for the soldiers, they shall not be allowed to dress their provisions in any other places." In about 1818 the civil barrack department was abolished on account of abuses which had grown up, and the duke of Wellington as mastergeneral of the ordnance and commander-in-chief transferred to the corps of Royal Engineers the duties of construction and maintenance of barracks. In 1826 a course of practical architecture was started at the school of military engineering at Chatham under Lieutenant-Colonel (afterwards Sir Charles) Pasley, the first commandant of the school, who himself wrote an outline of the course. Wellington interested himself in the barrack question, and under his orders single iron bedsteads were substituted for the wooden berths, two tiers high, in which two men slept in the same bed, then a certain cubical space per man was allotted, and cook-houses and ablutionrooms were added. Next, sergeants' messes were started, and ball courts allowed for the recreation of the men. It was not, however, till after the Crimean War that public attention was directed by the report dated 1857 of the royal commission on the sanitary state of the army, to the high death-rate, and certain sanitary defects in barracks and hospitals, such as overcrowding, defective ventilation, bad drainage and insufficient means of cooking and cleanliness, to which this excessive mortality was among other causes assigned.

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In 1857 a commission appointed for improving the sanitary condition of barracks and hospitals made an exhaustive inspection of the barracks in the United Kingdom, and reported in 1861. This was followed by similar commissions to examine the barracks in the Mediterranean stations and in India. These commissions, besides making valuable recommendations for the improvement of almost every barrack inspected by them, laid down the general sanitary principles applicable to the arrangement and construction of military barracks and hospitals; and in spite of the lapse of time, the reports repay close study by any one interested in sanitary science as applied to the construction and improvement of such buildings. The names of Sidney Herbert (afterwards Lord Herbert of Lea), Captain (afterwards Sir Douglas) Gallon, R.E., and John Sutherland, M.D., stand out prominently among those who contributed to the work. The commission was constituted a standing body in 1862, and continues its work to the present day, under the name of the Army Sanitary Committee, which advises the secretary of state for war on all sites for new barracks or hospitals, also upon type plans, especially as to sanitary details, and principles of sanitary construction and fitments. A definite standard of accommodation was laid down, which formed the basis of the first issue of the Barrack Synopsis in 1865. A general order dated 1845 had directed that a space of 450 to 500 cub. ft. per man should be provided in all new barracks at home stations; but this had not been applied in existing barracks or buildings appropriated as such, and when detailed examination was made, it was found that some men had actually less than 250 cub. ft., and out of accommodation for nominally 76,813 soldiers, 2003 only had 600 cub. ft. per man, which was the minimum scale now laid down by the royal commission of 1857. To give every soldier his allotted amount of 600 cub. ft., meant a reduction in accommodation of the barracks by nearly one-third the number. Many buildings were condemned as being entirely unsuitable for use as barracks; in other cases improvements were possible by alterations to buildings and opening-up of sites. Ventilation of the rooms was greatly improved, cook-houses, ablution-rooms and sanitary accessories were carefully examined and a proper scale laid down. Separate quarters for the married soldiers did not exist in many barracks, and in some instances married men's beds were found in the men's barrack-rooms without even a screen to separate them; in other cases, married people were accommodated together in a barrack-room, with only a blanket hung on a cord as a screen between the different families. The recommendations of the committee resulted in a single room being allotted to all married soldiers, and this accommodation has gradually improved up to the comfortable cottage now provided.

From the time of this first thorough inquiry into barrack accommodation, steady and systematic progress has been made. Although lack of funds has always hampered rapid progress, and keeps the accommodation actually existing below the standard aimed at, much has been done to improve the soldiers' condition in this respect. Numerous regimental depots and other barracks were built under the Military Forces Localization Act of 1872. The Barracks Act of 1890 replaced the worn-out huts at Aldershot, Colchester, Shorncliffe and Curragh by convenient and sanitary permanent buildings, and further additions and improvements have been made under the Military Works Acts of 1897, 1899 and 1901. As some evidence of the practical result of the care and money that has been expended on this work, it is interesting to note that while, in 1857, the annual rate of mortality in the army at home per 1000 men was 17.5 (compared with 9.2 for the civil male population of corresponding age), forty years later, in 1897, the rate of mortality in the army was only 3.42 per 1000. No doubt, improved barrack accommodation contributed greatly to this result. Barrack construction work remained in the hands of the Corps of Royal Engineers

until 1904, when a civil department was again formed under an architect styled "director of barrack construction," to deal with the construction of barracks at home stations, and the construction and maintenance of military hospitals.

British Colonial.—Barracks at colonial stations are governed by the general scale of accommodation in the Barrack Synopsis, modified according to the climate of the station, in the direction of increase in floor area and height of rooms. In the planning of rooms for occupation in tropical or sub-tropical countries provision has to be made for the freest possible circulation of air through the buildings. The walls have to be protected by verandahs from the direct rays of the sun, and the special local domestic arrangements have to be taken into consideration. For example, in hot countries it is usually undesirable to have kitchens directly attached to the dwelling-houses, sanitary arrangements vary according to the method's adopted, and in some cases it is necessary to provide a free circulation of air below the ground floors of all inhabited buildings by raising them off the ground some 4 ft. The aspect of the buildings will usually be arranged so as to catch the prevailing wind, and the mode of construction varies greatly according to the custom and resources of the country.

Indian Barracks.—In India, barracks for the British troops are built by the Royal Engineer officers detailed for military work duties, assisted by military foremen, who pass through the civil engineering colleges, and by a native subordinate staff. The scale of accommodation to be provided is laid down in the Indian army regulations, and is for the private soldier more liberal than is allowed by the home government for any of the colonial stations. The barrack-rooms are lofty and airy, with verandahs all round, and clerestory windows. Roofs are usually of double tiling. The allowance of space is 90 sq. ft. per man in rooms 16 ft. high, with, in addition, a day room adjoining for the use of the men for their meals or as a sitting-room. Recreation establishments are liberally provided for, and other means of recreation, such as bowling and skittle alleys, fives courts, plunge baths and cricket grounds, are given. Separate blocks of married quarters are provided, and schools for the children. Hospital accommodation on a higher scale than at home is necessary; but hill sanatoria have in recent years done much to improve the health of the troops by giving change of air, during the hot weather, to a large proportion of the men and families. Piped water supplies have replaced the old wells at many stations, and attention is being directed to improved cooking and sanitary arrangements.

Naval Barracks.—In recent years, large naval barracks have been built, notably at Portsmouth, Chatham and Devonport. These differ from military barracks principally in that they keep up the system of board-ship life to which the men are accustomed. Large barrack-rooms are provided with caulked floors like ships' decks, and have rows of hammocks slung across them; these are stowed in the day-time, when the rooms are used as mess-rooms. Ablution and sanitary arrangements are grouped together on the basement floors. Fine recreation establishments and canteens have been built. The officers' messes have splendid public rooms, but the officers' quarters are not so large as in military barracks, though no doubt spacious to the naval officer, accustomed as he is to a small cabin. Married quarters for the men are not provided except in connexion with coastquard stations.

Other Countries.—A great number of the German and French barracks are erected in the form of a large block of three or four storeys containing all the accommodation and accessories for officers, married and single non-commissioned officers and men, of a complete battalion or regiment in one building. Some of the modern barracks, however, are arranged more on the pavilion system with separate blocks; but the single block system is well liked on account of its compactness and the facility it gives for supervision; it is also more satisfactory from the architectural point of view. The system of allotment and arrangement of accommodation for these two great armies does not differ much, except in detail, from that adopted by the British army. The floor and cubic space allotted per man is a little less; accommodation for officers is not usually provided, except to a limited extent, unless the barracks are on a country site. The German army, however, now provides every regiment with a fine officers' mess-house furnished at the public expense. Married quarters for some of the non-commissioned officers are provided, but not for privates. American barracks are interesting, as providing for perhaps a higher class of recruit than usual; they are well designed and superior finish internally is given. The barracks are arranged usually on the separate block system, and centre round a post-exchange or soldiers' club, which is a combined recreation establishment, gymnasium and sergeants' mess, with bathhouse attached. Canteens for the sale of liquor were abolished in 1901.

See The Barrack Synopsis (1905); The Handbook of Design and Construction of Military Buildings (1905); The Army Regulations, India, vol. xii.

(E. N. S.)

BARRANDE, JOACHIM (1799-1883), Austrian geologist and palaeontologist, was born at Saugues, Haute Loire, on the 11th of August 1799, and educated in the École Polytechnique at Paris. Although he had received the training of an engineer, his first appointment was that of tutor to the duc de Bordeaux (afterwards known as the comte de Chambord), grandson of Charles X., and when the king abdicated in 1830, Barrande accompanied the royal exiles to England and Scotland, and afterwards to Prague. Settling in that city in 1831, he became occupied in engineering works, and his attention was then attracted to the fossils from the Lower Palaeozoic rocks of Bohemia. The publication in 1839 of Murchison's *Silurian System* incited Barrande to carry on systematic researches on the equivalent strata in Bohemia. For ten years (1840-1850) he made a detailed study of these rocks, engaging workmen specially to collect fossils, and in this

[v.03 p.0431]

way he obtained upwards of 3500 species of graptolites, brachiopoda, mollusca, crustacea (particularly trilobites) and fishes. The first volume of his great work, *Système silurien du centre de la Bohême* (dealing with trilobites), appeared in 1852; and from that date until 1881, he issued twenty-one quarto volumes of text and plates. Two other volumes were issued after his death in 1887 and 1894. It is estimated that he spent nearly £10,000 on these works. In addition he published a large number of separate papers. In recognition of his important researches the Geological Society of London in 1855 awarded to him the Wollaston medal.

The term Silurian was employed by Barrande, after Murchison, in a more comprehensive sense than was justified by subsequent knowledge. Thus the Silurian rocks of Bohemia were divided into certain stages (A to H)—the two lowermost, A and B without fossils (Azoic), succeeded by the third stage, C, which included the primordial zone, since recognized as part of the Cambrian of Sedgwick. The fourth stage (Étage D), the true lower Silurian, was described by Barrande as including isolated patches of strata with organic remains like those of the Upper Silurian. These assemblages of fossils were designated "Colonies," and regarded as evidence of the early introduction into the area of species from neighbouring districts, that became locally extinct, and reappeared in later stages. The interpretation of Barrande was questioned in 1854 by Edward Forbes, who pointed to the disturbances, overturns and crumplings in the older rocks as affording a more reasonable explanation of the occurrence of strata with newer fossils amid those containing older ones. Other geologists subsequently questioned the doctrine of "Colonies." In 1880 Dr J. E. Marr, from a personal study in the field, brought forward evidence to show that the repetitions of the fossiliferous strata on which the "Colonies" were based were due to faults. The later stages of Barrande, F, G and H, have since been shown by Emanuel Friedrich Heinrich Kayser (b. 1845) to be Devonian.

Despite these modifications in the original groupings of the strata, it is recognized that Barrande "made Bohemia classic ground for the study of the oldest fossiliferous formations." He died at Frohsdorf on the 5th of October 1883.

See "Sketch of the Life of Joachim Barrande," Geol. Mag. (1883), p. 529 (with portrait).

BARRANQUILLA, a city and port of Colombia, South America, capital of a province of the same name in the department of Atlantico, on the left bank of the Magdalena river about 7 m. above its mouth and $18\frac{1}{2}$ m. by rail from its seaport, Puerto Colombia. Pop. (est. 1902) 31,000. Owing to a dangerous bar at the mouth of the Magdalena the trade of the extensive territory tributary to that river, which is about 60% of that of the entire country, must pass in great part through Barranquilla and its seaport, making it the principal commercial centre of the republic. Savanilla was used as a seaport until about 1890, when shoals caused by drifting sands compelled a removal to Puerto Colombia, a short distance westward, where a steel pier, 4000 ft. in length, has been constructed to facilitate the handling of freight. The navigation of the Magdalena is carried on by means of light-draught steamboats which ascend to Yeguas, 14 m. below Honda, where goods are transhipped by rail to the latter place, and thence by pack animals to Bogotá, or by smaller boats to points farther up the river. Barranquilla was originally founded in 1629, but attracted no attention as a commercial centre until about the middle of the 19th century, when efforts were initiated to secure the trade passing through Cartagena. The city is built on a low plain, is regularly laid out, and has many fine warehouses, public buildings and residences, but its greater part, however, consists of mud-walled cabins supported by bamboo (guadua) framework and thatched with rushes. The water-supply is drawn from the Magdalena, and the city is provided with telephone, electric light and tram services. Owing to periodical inundations, the surrounding country is but little cultivated, and the greater part of the population, which is of the mixed type common to the lowlands of Columbia, is engaged in no settled productive occupation.

BARRAS, PAUL FRANÇOIS NICOLAS, COMTE DE (1755-1829), member of the French Directory of 1795-1799, was descended from a noble family of Provence, and was born at Fox-Amphoux. At the age of sixteen he entered the regiment of Languedoc as "gentleman cadet," but embarked for India in 1776. After an adventurous voyage he reached Pondicherry and shared in the defence of that city, which ended in its capitulation to the British on the 18th of October 1778. The garrison being released, Barras returned to France. After taking part in a second expedition to the East Indies in 1782-1783, he left the army and occupied the following years with the frivolities congenial to his class and to his nature. At the outbreak of the Revolution in 1789, he espoused the democratic cause, and became one of the administrators of the department of the Var. In June 1792 he took his seat in the high national court at Orleans; and later in that year, on the outbreak of war with the kingdom of Sardinia, he became commissioner to the French army of Italy, and entered the Convention (the third of the national assemblies of France) as a deputy for the department of the Var. In January 1793 he voted with the majority for the death of Louis XVI. Much of his time, however, was spent in missions to the districts of the south-east of France; and in this way he made the acquaintance of Bonaparte at the siege of Toulon. As an example of the incorrectness of the Barras Memoirs we may note that the writer assigned 30,000 men to the royalist defending force, whereas it was less than 12,000; he also sought to minimize the share taken by Bonaparte in the capture of that city.

In 1794 Barras sided with the men who sought to overthrow the Robespierre faction, and their success in the *coup d'état* of 9 Thermidor (27th of July) brought him almost to the front rank. In the next year, when the Convention was threatened by the malcontent National Guards of Paris, it appointed Barras to command the troops engaged in its defence. His nomination of Bonaparte as one of his subalterns led to the adoption of vigorous measures, which ensured the dispersion

[v.03 p.0432] of the royalists and malcontents in the streets near the Tuileries, 13 Vendémiaire (5th of October 1795). Thereupon Barras became one of the five Directors who controlled the executive of the French republic. Owing to his intimate relations with Joséphine de Beauharnais, he helped to facilitate a marriage between her and Bonaparte; and many have averred, though on defective evidence, that Barras procured the appointment of Bonaparte to the command of the army of Italy early in the year 1796. The achievements of Bonaparte gave to the Directory a stability which it would not otherwise have enjoyed; and when in the summer of 1797 the royalist and constitutional opposition again gathered strength, Bonaparte sent General Augereau (q.v.), a headstrong Jacobin, forcibly to repress that movement by what was known as the coup d'état of 18 Fructidor (4th September). Barras and the violent Jacobins now carried matters with so high a hand as to render the government of the Directory odious; and Bonaparte had no difficulty in overthrowing it by the coup d'état of 18-19 Brumaire (9th-10th of November). Barras saw the need of a change and was to some extent (how far will perhaps never be known) an accomplice in Bonaparte's designs, though he did not suspect the power and ambition of their contriver. He was left on one side by the three Consuls who took the place of the five Directors and found his political career at an end. He had amassed a large fortune and spent his later years in voluptuous ease. Among the men of the Revolution few did more than Barras to degrade that movement. His immorality in both public and private life was notorious and contributed in no small degree to the downfall of the Directory, and with it of the first French Republic. Despite his profession of royalism in and after 1815, he remained more or less suspect to the Bourbons; and it was with some difficulty that the notes for his memoirs were saved from seizure on his death on the 29th of January 1829.

> Barras left memoirs in a rough state to be drawn up by his literary executor, M. Rousselin de St Albin. The amount of alteration which they underwent at his hands is not fully known; but M. George Duruy, who edited them on their publication in 1895, has given fairly satisfactory proofs of their genuineness. For other sources respecting Barras see the Memoirs of Gohier, Larevellière-Lépeaux and de Lescure; also Sciout, Le Directoire (4 vols., Paris, 1895-1897), A. Sorel, L'Europe et la Révolution française (esp. vols. v. and vi., Paris, 1903-1904), and A. Vandal, L'Avènement de Bonaparte (Paris, 1902-1904).

(J. HL. R.)

BARRATRY (O. Fr. bareter, barater, to barter or cheat), in English criminal law, the offence (more usually called common barratry) of constantly inciting and stirring up quarrels in disturbance of the peace, either in courts or elsewhere. It is an offence both at common law and by statute, and is punishable by fine and imprisonment. By a statute of 1726, if the person guilty of common barratry belonged to the profession of the law, he was disabled from practising in the future. It is a cumulative offence, and it is necessary to prove at least three commissions of the act. For nearly two centuries there had been no record of an indictment having been preferred for this offence, but in 1889 a case occurred at the Guildford summer assizes, R. v. Bellgrove (The Times, 8th July 1889). As, however, the defendant was convicted of another offence, the charge was not proceeded upon. (See Pollock and Maitland, History of English Law; Russell, Crimes and Misdemeanours; Stephen, Criminal Law.)

In marine insurance barratry is any kind of fraud committed upon the owner or insurers of a ship by a master with the intention of benefiting himself at their expense. Continental jurists give a wider meaning to barratry, as meaning any wilful act by the master or crew, by whatever motive induced, whereby the owners or charterers are damnified. In bills of lading it is usual to except it from the shipowners' liability (see Affreightment).

In Scotland, barratry is the crime committed by a judge who is induced by bribery to pronounce judgment.

BARRÉ, ISAAC (1726-1802), British soldier and politician, was born at Dublin in 1726, the son of a French refugee. He was educated at Trinity College, Dublin, entered the army, and in 1759 was with Wolfe at the taking of Quebec, on which occasion he was wounded in the cheek. His entry into parliament in 1761 under the auspices of Lord Shelburne, who had selected him "as a bravo to run down Mr Pitt," was characterized by a virulent attack on Pitt, of whom, however, he became ultimately a devoted adherent. A vigorous opponent of the taxation of America, his mastery of invective was powerfully displayed in his championship of the American cause, and the name "Sons of Liberty," which he had applied to the colonists in one of his speeches, became a common designation of the American organizations directed against the Stamp Act, as well as of later patriotic clubs. His appointment in 1782 to the treasurership of the navy, which carried with it a pension of £3200 a year, at a time when the government was ostensibly advocating economy, caused great discontent; subsequently, however, he received from the younger Pitt the clerkship of the pells in place of the pension, which thus was saved to the public. Becoming blind, he retired from office in 1790 and died on the 20th of July 1802.

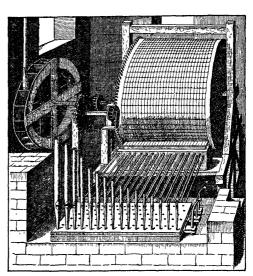
BARRE, a city of Washington county, Vermont, U.S.A., in the north central part of the state, about 6 m. S.E. of Montpelier. Pop. (1890) 4146; (1900) 8448, of whom 2831 were foreign-born; (1910, census) 10,734. It is served by the Central Vermont and the Montpelier & Wells River railways, and is connected by electric street railways with Montpelier. Barre is an important seat of the granite industry, and manufactures monuments and tombstones, stone-cutting implements and other machinery. In 1905 the city's factory products were valued at \$3,373,046, of which 86.9% was the value of the monuments and tombstones manufactured. Among its institutions are the Aldrich public library and Goddard Seminary (1870; Universalist). There is a beautiful granite

statue of Burns (by J. Massey Rhind), erected in 1899 by the Scotsmen of Barre. The water-works are owned and operated by the municipality. Settled soon after the close of the War of Independence, the township of Barre (pop. in 1910, 4194) was organized in 1793 and named in honour of Isaac Barré (1726-1802), a defender of American rights in the British parliament. The present city, chartered in 1894, was originally a part of the township.

BARREL (a word of uncertain origin common to Romance languages; the Celtic forms, as in the Gaelic baraill, are derived from the English), a vessel of cylindrical shape, made of staves bound together by hoops, a cask; also a dry and liquid measure of capacity, varying with the commodity which it contains (see Weights and Measures). The term is applied to many cylindrical objects, as to the drum round which the chain is wound in a crane, a capstan or a watch; to the cylinder studded with pins in a barrel-organ or musical-box; to the hollow shaft in which the piston of a pump works; or to the tube of a gun. The "barrel" of a horse is that part of the body lying between the shoulders and the quarters. For the system of vaulting in architecture known as "barrel-vaulting" see Vault.

BARREL-ORGAN (Eng. "grinder-organ," "street-organ," "hand-organ," "Dutch organ"; Fr. orgue de Barbarie, orque d'Allemagne, orque mécanique, cabinet d'orque, serinette; Ger. Drehorgel, Leierkasten; Ital. organetto a manovella, organo tedesco), a small portable organ mechanically played by turning a handle. The barrel-organ owes its name to the cylinder on which the tunes are pricked out with pins and staples of various lengths, set at definite intervals according to the scheme required by the music. The function of these pins and staples is to raise balanced keys connected by simple mechanism with the valves of the pipes, which are thus mechanically opened, admitting the stream of air from the wind-chest. The handle attached to the shaft sets the cylinder in slow rotation by means of a worm working in a fine-toothed gear on the barrelhead; the same motion works the bellows by means of cranks and connecting rods on the shaft. The wind is thereby forced into a reservoir, whence it passes into the wind-chest, on the sides of which are grouped the pipes. The barrel revolves slowly from back to front, each revolution as a rule playing one complete tune. A notch-pin in the barrelhead, furnished with as many notches as there are tunes, enables the performer to shift the barrel and change the tune. The ordinary street barrel-organ had a compass varying from 24 to 34 notes, forming a diatonic scale with a few accidentals, generally F#, G#, C#. There were usually two stops, one for the open pipes of metal, the other for the closed wooden pipes. Barrel-organs have been made with as many as three or four cylinders set in a circular revolving frame, but these more elaborate instruments were mainly used in churches^[1] and chapels, a purpose for which they were in great demand for playing hymns, chants and voluntaries during the 18th and early 19th centuries. A barrel-organ was built for Fulham church by Wright, and a large instrument with four barrels was constructed by Bishop for Northallerton church in 1820.

The origin of the barrel-organ is now clearly established, and many will doubtless be surprised to find that it must be sought in the Netherlands as early as the middle of the 15th century, and that accurate and detailed diagrams of every part of the mechanism for a large stationary barrel-organ worked by hydraulic power were published in 1615. There are letters patent preserved in the archives of Belgium appointing a certain organ-builder, Jehan van Steenken, dit Aren, "Master of organs which play of themselves"; in the original Flemish Meester van orgelen spelende bij hen selven.^[2] This organ was not a portable one like English street organs, but a more imposing instrument, as we learn from other documents giving a detailed account of the moneys paid to Maistre Jehan for conveying the organs from Bruges to Brussels.[3] Steenken was, by virtue of the same letters patent, awarded an annual pension of fifty Rhenish florins in consideration of the services rendered to the duke of Burgundy, and on condition of his submitting to his by hydraulic power, from Solomon de Caus, Les liege Philip the Good all other instruments he might Raisons des forces mouvantes (Frankfort-onmake in the future. There is nothing singular in the Main, 1615). early date of this invention, for the 15th century was



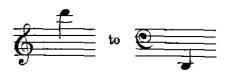
 ${\it Fig.}\ 1.-{\it Large}\ stationary\ barrel-organ\ worked$

distinguished for the extraordinary impulse which the patronage and appreciation of the dukes of Burgundy gave to automatic contrivances of all kinds, carillons, clocks, speaking animals and other curiosities due to Flemish genius.^[4] No contemporary illustration is forthcoming, but in 1615 Solomon de Caus, who avowedly owed his inspiration to Hero and Vitruvius, describes a number of hydraulic machines, amongst which is the barrel-organ, [5] illustrating his description by means of several large drawings and diagrams very carefully carried out. De Caus' organ, entitled "Machine par laquelle l'on fera sonner un jeu d'orgues par le moyen de l'eau," was built up on a wall a foot thick. In the illustrations the barrel is shown to be divided into bars, and each bar into eight beats for the quavers. The whole drum is pierced with holes at the intersecting points, the pins being movable, so that when the performer grew tired of one tune, he could rearrange the pins to form another. The four bellows are set in motion by means of ropes strained over pulleys and attached to four cranks on the rotating shaft. Solomon de Caus lays no claim to the invention of this organ, but only to the adaptation of hydraulic power for revolving the drum;

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on the contrary, in a dissertation on the invention of hydraulic machines and organs, he states that there was evidently some difference between the organs of the ancients and those of his day, since there is no mention in the classics of any musical wheel by means of which tunes could be played in several parts—the ancients, indeed, seem to have used their fingers on the keyboard to sound their organs. The eighteen keys drawn in one diagram bear names, beginning at the left, D, C, B, A, G, F, F \sharp , E, D, C, B, A, G, F, E, D, C, B; De Caus states that only half the keyboard is given for want of space; the compass, therefore, probably was as shown, with a few accidentals.

A barrel-organ, also worked by hydraulic power, is somewhat fantastically drawn by Robert Fludd in a work^[6] published two years after that of Solomon de Caus. This diagram is of no value except as a curiosity, for the author betrays a very imperfect knowledge of the mechanical principles involved. The piece of music actually set on de Caus' barrel-organ, six bars of which can be made out,^[7]



consists of a madrigal, "Chi fara fed' al ciel," by Alessandro Striggio, written in organ tablature by Peter Philips, organist of the Chapel Royal, Brussels, at the end of the 16th century. [8] A French barrel-organ [9] in the collection of the Brussels Conservatoire, bearing the date "5 Mars 1797," has the following compass with flats, beginning at the left:—



Other evidences of the origin of the barrel-organ are not wanting. The inventory of the organs and other keyboard instruments belonging to the duke of Modena, drawn up in 1598, contains two entries of an *organo Tedesco*.^[10] In England these organs were also known as "Dutch organs," and the name clung to the instrument even in its diminutive form of hand-organ of the itinerant musician. In Jedediah Morse's description of the manners and customs of the Netherlands, [11] we find the following allusion:—"The diversions of the Dutch differ not much from those of the English, who seem to have borrowed from them the neatness of their drinking booths, skittle and other grounds ... which form the amusements of the middle ranks, not to mention their hand-organs and other musical inventions." An illustration of the hand-organ of that period is given in Knight's *London*^[12] being one of a collection of street views published by Dayes in 1789. In a description of Bartholomew Fair, as held at the beginning of the 18th century, is a further reference to the Dutch origin of the barrel-organ:—"A band at the west-end of the town, well known for playing on winter evenings before Spring Garden Coffee House, opposite Wigley's great exhibition room, consisted of a double drum, a Dutch organ, the tambourine, violin, pipes and the Turkish jingle used in the army. This band was generally hired at one of the booths of the fair." [13] Mr Thomas Brown relates that one Mr Stephens, a *Poultry* author, proposed to parliament for any one that should presume to keep an organ in a Publick House to be fined £20 and made incapable of being an ale-draper for the future. [14] In 1737 Horace Walpole writes^[15]:—"I am now in pursuit of getting the finest piece of music that ever was heard; it is a thing that will play eight tunes. Handel and all the great musicians say that it is beyond anything they can do, and this may be performed by the most ignorant person, and when you are weary of those eight tunes, you may have them changed for any other that you like." The organ was put in a lottery and fetched £1000.

There was a very small barrel-organ in use during the 18th and 19th centuries, known as the bird-organ (Fr. serinette, turlutaine, merline). One of these now in the collection of the Brussels Conservatoire is described by V. C. Mahillon. The instrument is in the form of a book, on the back of which is the title "Le chant des oiseaux, Tome vi." There are ten pewter stopped pipes giving the scale of G with the addition of F_b and A two octaves higher. The whole instrument measures approximately $8 \times 5\frac{1}{2} \times 2\frac{3}{4}$ in. and plays eight tunes. Mozart wrote an $Andante^{[17]}$ for a small barrel-organ.

For an illustration of the construction of the barrel-organ during the 18th century, consult P. M. D. J. Engramelle, *La Tonotechnie ou l'art de noter les cylindres et tout ce qui est susceptible de notage dans les instruments de concerts méchaniques* (Paris, 1775), with engravings (not in the British Museum); and for a clear diagram of the modern instrument the article on "Automatic Appliances connected with Music," by Dr. E. J. Hopkins, in Grove's *Dictionary of Music and Musicians*, vol. i. (1904), p. 134.

(K. S.)

[1] This practice had evidently not been adopted in Germany, as the following instance will show. The use of barrel-organs (*Drehorgeln*) in country churches was seriously recommended by an anonymous writer in two German papers at the beginning of the 19th century (*Beobachter an der Spree*, Berlin, 22nd October 1821, and in *Markische Boten*, Nos. 138 and 139, 1821). The organist Wilke of Leipzig published in reply an article in the *Allgem. musik. Zeitung* (1822, pp. 777 et seq.) in which "he very properly repudiated such a laughable recommendation."

[v.03 p.0434]

- [2] Archives générales du royaume de Belgique, Chambre des Comptes, No. 2, 449 r°. cf. 52 r°.; and Edmund van der Straeten, La Musique aux Pays-Bas, vol. vii. pp. 230-232.
- [3] Van der Straeten, op. cit. p. 299.
- [4] Van der Straeten, op. cit. p. 231.
- [5] Solomon de Caus, Les Raisons des forces mouvantes (Frankfort, 1615), problems 25, 28, 29, 30.
- [6] Historia utriusque cosmi (Oppenheim, 1617), t. i., experimentum viii. p. 483.
- [7] *Op. cit.* problem 29 shows the arrangement of the bellows for the wind-supply. In problem 30 is drawn a large section of the barrel, showing six bars of music represented by the pin tablature, which can be actually deciphered by the help of the keyboard included in the drawing. These diagrams are admirably clear and of real technical value. A copy of this work is in the library of the British Museum.
- [8] See also E. van der Straeten, who has translated Philips' setting into modern notation, *op. cit.* t. vi. pp. 506 and 510.
- [9] See V. C. Mahillon, Catalogue descriptif (Brussels, 1896), No. 1137, p. 371.
- [10] *Tedesco* was applied by Italians to both German and Dutch. Count Valdrighi, *Musurgiana I. Serandola, Pianoforte, Salterio* (Modena, 1879), pp. 27 and 28; and E. van der Straeten, *op. cit.* vol. vi. p. 122.
- [11] Jedediah Morse American Geography, part ii. p. 334 (Boston, Mass., 1796).
- [12] Knight's *London*, vol. i. p. 144.
- [13] Hone's Every Day Book, i. p. 1248.
- [14] Collection of all the Dialogues written by Mr Thomas Brown (London, 1704), p. 297.
- [15] Hone's Every Day Book, ii. pp. 1452-1453.
- [16] See Catalogue descriptif (Ghent, 1880), Nos. 461 and 462.
- [17] Breitkopf and Härtel's Critically revised edition of Mozart's Works, series x. no. 10.

BARREN ISLAND, a volcanic island in the Bay of Bengal. It has an irregularly circular form of about 2 m. in diameter, composed of an outer rim rising to a height of from 700 to 1000 ft., with a central cone the altitude of which is 1015 ft. This cone rises from a depth of 800 fathoms below the sea. It was active between 1789 and 1832, but has since been dormant.

BARRÈS, MAURICE (1862-), French novelist and politician, was born at Charmes (Vosges) on the 22nd of September 1862; he was educated at the lycée of Nancy, and in 1883 went to Paris to continue his legal studies. He was already a contributor to the monthly periodical, Jeune France, and he now issued a periodical of his own, Les Taches d'encre, which survived for a few months only. After four years of journalism he went to Italy, where he wrote Sous l'œil des barbares (1888), the first volume of a trilogie du moi, completed by Un Homme libre (1889), and Le Jardin de Bérénice (1891). He divided the world into moi and the barbarians, the latter including all those antipathetic to the writer's individuality. These apologies for individualism were supplemented by L'Ennemi des lois (1892), and an admirable volume of impressions of travel, Du sang, de la volupté et de la mort (1893). His early books are written in an elaborate style and are often very obscure. Barrès carried his theory of individualism into politics as an ardent partisan of General Boulanger. He directed a Boulangist paper at Nancy, and was elected deputy in 1889, retaining his seat in the legislature until 1893. His play, Une Journée parlementaire, was produced at the Comédie Française in 1894. In 1897 he began his trilogy, Le Roman de l'énergie nationale, with the publication of Les Déracinés. The series is a plea for local patriotism, and for the preservation of the distinctive qualities of the old French provinces. The first narrates the adventures of seven young Lorrainers, who set out to conquer fortune in Paris. Six of them survive in the second novel of the trilogy, L'Appel au soldat (1900), which gives the history of Boulangism; the sequel, Leurs figures (1902), deals with the Panama scandals. Later works are: -Scènes et doctrines du nationalisme (1902); Les Amitiés françaises (1903), in which he urges the inculcation of patriotism by the early study of national history; Ce que j'ai vu à Rennes (1904); Au service de l'Allemagne (1905), the experiences of an Alsatian conscript in a German regiment; Le Voyage de Sparte (1906). M. Barrès was admitted to the French Academy in 1906.

See also R. Doumic, Les Jeunes (1896); J. Lionnet, L'Évolution des idees (1903); Anatole France, La Vie littéraire (4th series, 1892).

BARRETT, LAWRENCE (1838-1891), American actor, was born of Irish parents in Paterson, New Jersey, on the 4th of April 1838. His family name was Brannigan. He made his first stage appearance at Detroit as Murad in *The French Spy* in 1853. In December 1856 he made his first New York appearance at the Chambers Street theatre as Sir Thomas Clifford in *The Hunchback*. In 1858 he was in the stock company at the Boston Museum. He served with distinction in the Civil War as captain in the 28th Massachusetts infantry regiment. From 1867 to 1870, with John M^cCullough, he managed the California theatre, San Francisco. Among his many and varied parts may be mentioned Hamlet, Lear, Macbeth, Shylock, Richard III., Wolsey, Benedick, Richelieu,

David Garrick, Hernani, Alfred Evelyn, Lanciotto in George Henry Boker's (1823-1890) *Francesca da Rimini*, and James Harebell in *The Man o' Airlie*. He played Othello to Booth's Iago and Cassius to his Brutus. He acted in London in 1867, 1881, 1883 and 1884, his Richelieu in Bulwer Lytton's drama being considered his best part. He wrote a life of Edwin Forrest in the *American Actors Series* (Boston, 1881), and an admirable sketch of Edwin Booth in *Edwin Booth and his Contemporaries* (Boston, 1886). He died on the 20th of March 1891.

BARRETT, LUCAS (1837-1862), English naturalist and geologist, was born in London on the 14th of November 1837, and educated at University College school and at Ebersdorf. In 1855 he accompanied R. McAndrew on a dredging excursion from the Shetlands to Norway and beyond the Arctic Circle; and subsequently made other cruises to Greenland and to the coast of Spain. These expeditions laid the foundations of an extensive knowledge of the distribution of marine life. In 1855 he was engaged by Sedgwick to assist in the Woodwardian Museum at Cambridge, and during the following three years he aided the professor by delivering lectures. He discovered bones of birds in the Cambridge Greensand, and he also prepared a geological map of Cambridge on the one-inch Ordnance map. In 1859, when twenty-two years of age, he was appointed director of the Geological Survey of Jamaica. He there determined the Cretaceous age of certain rocks which contained Hippurites, the new genus *Barrettia* being named after him by S. P. Woodward; he also obtained many fossils from the Miocene and newer strata. He was drowned at the early age of twenty-five, on the 18th of December 1862, while investigating the sea-bottom off Kingston, Jamaica.

Obituary by S. P. Woodward in *Geologist* (Feb. 1863), p. 60.

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BARRETT, WILSON (1846-1904), English actor, manager and playwright, was born in Essex on the 18th of February 1846, the son of a farmer. He made his first appearance on the stage at Halifax in 1864, and then played in the provinces alone and with his wife, Caroline Heath, in East Lynne. After managerial experiences at Leeds and elsewhere, in 1879 he took the management of the old Court theatre, where he introduced Madame Modjeska to London, in an adaptation of Schiller's Maria Stuart, Adrienne Lecouvreur, La Dame aux camélias and other plays. It was not till 1881, however, when he took the Princess's theatre, that he became well known to the public in the emotional drama, The Lights o' London, by G. R. Sims. The play which made him an established favourite was The Silver King by Henry Arthur Jones, perhaps the most successful melodrama ever staged, produced in 1882 with himself as Wilfred Denver, his brother George (an excellent comedian) in the cast, and E. S. Willard (b. 1853) as the "Spider,"—this being the part in which Mr Willard, afterwards a well-known actor both in America and England, first came to the front. Barrett played this part for three hundred nights without a break, and repeated his London success in W. G. Wills's Claudian which followed. In 1884 he appeared in Hamlet, but soon returned to melodrama, and though he had occasional seasons in London he acted chiefly in the provinces. In 1886 he made his first visit to America, repeated in later years, and in 1898 he visited Australia. During these years the London stage was coming under new influences, and Wilson Barrett's vogue in melodrama had waned. But in 1895 he struck a new vein of success with his drama of religious emotion, The Sign of the Cross, which crowded his theatre with audiences largely composed of people outside the ordinary circle of playgoers. He attempted to repeat the success with other plays of a religious type, but not with equal effect, and several of his later plays were failures. He died on the 22nd of July 1904. Wilson Barrett was a sterling actor of a robust type and striking physique, not remarkable for intellectual finesse, but excelling in melodrama, and very successful as the central figure on his own stage.

BARRHEAD, a police burgh of Renfrewshire, Scotland, situated on the Levern, 7½ m. S.W. of Glasgow by the Glasgow & South-Western railway. Pop. (1901) 9855. Founded in 1773, it has gradually absorbed the villages of Arthurlie, Dovecothall and Grahamston, and become a thriving town. The chief industries include bleaching, calico-printing, cotton-spinning, weaving, iron and brass founding, engineering and the manufacture of sanitary appliances. Neilston (pop. 2668), about 2 m. S.W., has bleachfields and print-works, and 2 m. N. by E. lie Hurlet, where are important manufactures of alum and other chemicals, and Nitshill (pop. 1242) with chemical works, quarries and collieries.

BARRICADE, or Barricado (from the Span. *barricada*, from *barrica*, a cask, casks filled with earth having been early used to form barricades), an improvised fortification of earth, pavingstones, trees or any materials ready to hand, thrown up, especially across a street, to hinder the advance of an enemy; in the old wooden warships a fence or wooden rail, supported by stanchions and strengthened by various materials, extending across the quarter-deck as a protection during action.

BARRIE, JAMES MATTHEW (1860-), British novelist and dramatist, was born at Kirriemuir, a small village in Forfarshire, on the 9th of May 1860. He was educated at the Dumfries academy and Edinburgh University. He has told us in his quasi-autobiographical Margaret Ogilvy that he wrote tales in the garret before he went to school, and at Edinburgh wrote the greater part of a three-volume novel, which a publisher presumed was the work of a clever lady and offered to publish for £100. The offer was not accepted, and it was through journalism that he found his way to literature. After a short period of waiting in Edinburgh, he became leader-writer on the Nottingham Journal in February 1883. To this paper he contributed also special articles and notes, which provided an opening and training for his personal talent. He soon began to submit articles to London editors, and on the 17th of November 1884 Mr Frederick Greenwood printed in the St James's Gazette his article on "An Auld Licht Community." With the encouragement of this able editor, more Auld Licht "Idylls" followed; and in 1885 Mr Barrie moved to London. He

continued to write for the St James's Gazette and for Home Chimes (edited by Mr F. W. Robinson). He was soon enlisted by Mr Alexander Riach for the Edinburgh Evening Dispatch, which in turn led to his writing (over the signature "Gavin Ogilvy") for Dr Robertson Nicoll's British Weekly. Later he became a contributor to the Scots (afterwards National) Observer, edited by W. E. Henley, and also to the Speaker, upon its foundation in 1890. In 1887 he published his first book, Better Dead. It was a mere jeu d'esprit, a specimen of his humorous journalism, elaborated from the St James's Gazette. This was followed in 1888 by Auld Licht Idylls, a collection of the Scots village sketches written for the same paper. They portrayed the life and humours of his native village, idealized as "Thrums," and were the fruits of early observation and of his mother's tales. "She told me everything," Mr Barrie has written, "and so my memories of our little red town were coloured by her memories." Kirriemuir itself was not wholly satisfied with the portrait, but "Thrums" took its place securely on the literary map of the world. In the same year he published An Edinburgh Eleven, sketches from the British Weekly of eminent Edinburgh students; also his first long story, When a Man's Single, a humorous transcription of his experiences as journalist, particularly in the Nottingham office. The book was introduced by what was in fact another Thrums "Idyll," on a higher level than the rest of the book. In 1889 came A Window in Thrums. This beautiful book, and the Idylls, gave the full measure of Mr Barrie's gifts of humanity, humour and pathos, with abundant evidence of the whimsical turn of his wit, and of his original and vernacular style. In 1891 he made a collection of his lighter papers from the St James's Gazette and published them as My Lady Nicotine. In 1891 appeared his first long novel, The Little Minister, which had been first published serially in Good Words. It introduced, not with unmixed success, extraneous elements, including the winsome heroine Babbie, into the familiar life of Thrums, but proved the author's possession of a considerable gift of romance. In 1894 he published Margaret Ogilvy, based on the life of his mother and his own relations with her, most tenderly conceived and beautifully written, though too intimate for the taste of many. The book is full of revelations of great interest to admirers of Mr Barrie's genius. The following year came Sentimental Tommy, a story tracing curiously the psychological development of the "artistic temperament" in a Scots lad of the people. R. L. Stevenson supposed himself to be portrayed in the hero, but it may be safely assumed that the author derived his material largely from introspection. The story was completed by a sequel, Tommy and Grizel, published in 1900. The effect of this story was somewhat marred by the comparative failure of the scenes in society remote from Thrums. In 1902 he published *The Little* White Bird, a pretty fantasy, wherein he gave full play to his whimsical invention, and his tenderness for child life, which is relieved by the genius of sincerity from a suspicion of mawkishness. This book contained the episode of "Peter Pan," which afterwards suggested the play of that name. In the meantime Mr Barrie had been developing his talent as a dramatist. In 1892 Mr Toole had made a great success at his own theatre of Barrie's Walker, London, a farce founded on a sketch in When a Man's Single. In 1893 Mr Barrie married Miss Ansell (divorced in 1909), who had acted in Walker, London. In this year he wrote, with Sir A. Conan Doyle, a play called Jane Annie. He found more success, however, in The Professor's Love-Story in 1895; and in 1897 the popularity of his dramatized version of *The Little Minister* probably confirmed him in a predilection for drama, evident already in some of his first sketches in the Nottingham Journal. In 1900 Mr Bourchier produced The Wedding Guest, which was printed as a supplement to the Fortnightly Review in December of the same year. After the publication of The Little White Bird, Mr Barrie burst upon the town as a popular and prolific playwright. The struggling journalist of the early 'nineties had now become one of the most prosperous literary men of the day. In 1903 no fewer than three plays from his hand held the stage—Quality Street, The Admirable Crichton and Little Mary. The year 1904 produced Peter Pan, a kind of poetical pantomime, in which the author found scope for some of his most characteristic and permanently delightful gifts. In 1905 Alice-Sit-by-the-Fire and in 1908 What Every Woman Knows were added to the list. As dramatist Mr Barrie brought, to a sphere rather ridden by convention, a method wholly unconventional and a singularly fresh fancy, seasoned by a shrewd touch of satirical humour; and in Peter Pan he proved himself a Hans Andersen of the stage. In literature, the success of "Thrums" produced a crop of imitations, christened in derision by W. E. Henley the "Kailyard School," though the imitations were by no means confined to Scotland. In this school the Auld Licht Idylls and A Window in Thrums remained unsurpassed and unapproached. The Scots village tale was no novelty in literature—witness John Gait, the Chronicles of Carlingford and George MacDonald. Yet Mr Barrie, in spite of a dialect not easy to the Southron, contrived to touch a more intimate and more responsive chord. With the simplest materials he achieved an almost unendurable

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See also *J. M. Barrie and His Books*, by J. A. Hamerton (Horace Marshall, 1902); and for bibliography up to May 1903, *English Illustrated Magazine*, vol. xxix. (N.S.), p. 208.

humanity of "Thrums" and the bizarre and tender fantasy of Peter Pan.

pathos, which yet is never forced; and the pathos is salted with humour, while about the moving homeliness of his humanity play the gleams of a whimsical wit. Stevenson, in a letter to Mr Henry James, in December 1892, said justly of Barrie that "there was genius in him, but there was a journalist on his elbow." This genius found its most perfect and characteristic expression in the

(W. P. I.)

BARRIE, the capital of Simcoe county, Ontario, Canada, 56 m. N. of Toronto, on Lake Simcoe, an important centre on the Grand Trunk railway. It contains several breweries, carriage factories, boat-building and railway shops, and manufactories of woollens, stoves and leather. It is also a summer resort and the starting-point for the numerous Lake Simcoe steamers. Pop. (1901) 5949.

BARRIÈRE, THÉODORE (1823-1877), French dramatist, was born in Paris in 1823. He

belonged to a family of map engravers which had long been connected with the war department, and spent nine years in that service himself. The success of a vaudeville he had performed at the Beaumarchais and which was immediately snapped up for the repertory of the Palais Royal, showed him his real vocation. During the next thirty years he signed, alone or in collaboration, over a hundred plays; among the most successful were: La Vie de bohème (1849), adapted from Henri Murger's book with the novelist's help; Manon Lescaut (1851); Les Filles de marbre (1853); L'Héritage de Monsieur Plumet (1858); Les Faux Bonshommes (1856) with Ernest Capendu; Malheureux vaincus (1865), which was forbidden by the censor; Le Gascon (1878). Barrière died in Paris on the 16th of October 1877.

See also Revue des deux mondes (March 1859).

BARRIER TREATY, the name given first to the treaty signed on 29th of October 1709 between Great Britain and the states-general of the United Netherlands, by which the latter engaged to guarantee the Protestant succession in England in favour of the house of Hanover; while Great Britain undertook to procure for the Dutch an adequate barrier on the side of the Netherlands, consisting of the towns of Furnes, Nieuport, Ypres, Menin, Lille, Tournai, Condé, Valenciennes, Maubeuge, Charleroi, Namur, Halle, Damme, Dendermond and the citadel of Ghent. The treaty was based on the same principle of securing Holland against French aggression that had inspired that of Ryswick in 1698, by the terms of which the chief frontier fortresses of the Netherlands were to be garrisoned by Dutch troops. A second Barrier Treaty was signed between Great Britain and Holland on 29th of January 1713, by which the strong places designed for the barrier were reduced to Furnes, the fort of Knocke, Ypres, Menin, Tournai, Mons, Charleroi and the citadel of Ghent, and certain fortresses in the neighbourhood of that city and of Bruges; Great Britain undertaking to obtain the right for the Dutch to garrison them from the future sovereign of the Spanish Netherlands. Its terms were included in the treaty of Rastatt, between the emperor and France, signed on the 7th of March 1714. A third Barrier Treaty was signed in November 1715.

See Jean Dumont, Corps universel diplomatique, &c. (1726-1731), vol. viii.

BARRILI, ANTONIO GIULIO (1836-), Italian novelist, was born at Savona, and was educated for the legal profession, which he abandoned for journalism in Genoa. He was a volunteer in the campaign of 1859 and served with Garibaldi in 1866 and 1867. From 1865 (*Capitan Dodero*) onwards he published a large number of books of fiction, which had wide popularity, his work being commonly compared with that of Victor Cherbuliez. Some of the best of the later ones are *Santa Cecilia* (1866), *Come un Sogno* (1875), and *L'Olmo e l' Edera* (1877). His *Raggio di Dio* appeared in 1899. Barrili also wrote two plays and various volumes of criticism, including *Il rinnovamento letterario italiano* (1890). He was elected to the Italian chamber of deputies in 1876; and in 1889 became professor of Italian literature at Genoa.

BARRING-OUT, a custom, formerly common in English schools, of barring the master out of the school premises. A typical example of this practice was at Bromfield school, Cumberland, where William Hutchinson says "it was the custom, time out of mind, for the schoolars, at Fasting's Even (the beginning of Lent) to depose and exclude the master from the school for three days." During this period the school doors were barricaded and the boys armed with mock weapons. If the master's attempts to re-enter were successful, extra tasks were inflicted as a penalty, and willingly performed by the boys. On the third day terms of capitulation, usually in Latin verse, were signed, and these always conceded the immediate right to indulge in football and a cockfight. The custom was long retained at Eton and figures in many school stories.

BARRINGTON, DAINES (1727-1800), English lawyer, antiquary and naturalist, was born in 1727, fourth son of the first Viscount Barrington. He was educated for the profession of the law, and after filling various posts, was appointed a Welsh judge in 1757 and afterwards second justice of Chester. Though an indifferent judge, his Observations on the Statutes, chiefly the more ancient, from Magna Charta to 21st James I., cap. 27, with an appendix, being a proposal for new-modelling the Statutes (1766), had a high reputation among historians and constitutional antiquaries. In 1773 he published an edition of Orosius, with Alfred's Saxon version, and an English translation with original notes. His Tracts on the Probability of reaching the North Pole (1775) were written in consequence of the northern voyage of discovery undertaken by Captain C. J. Phipps, afterwards Lord Mulgrave (1744-1792). Barrington's other writings are chiefly to be found in the publications of the Royal and Antiquarian Societies, of both of which he was long a member, and of the latter vice-president. Many of these were collected by him in a quarto volume entitled Miscellanies on various Subjects (1781). He contributed to the Philosophical Transactions for 1780 an account of Mozart's visit at eight years of age to London. In his Miscellanies on varied subjects he included this with accounts of four other prodigies, namely, Crotch, Charles and Samuel Wesley, and Garrett Wellesley, Lord Mornington. Among the most curious and ingenious of his papers are his Experiments and Observations on the Singing of Birds, and his Essay on the Language of Birds. He died on the 14th of March 1800 and was buried in the Temple church.

BARRINGTON, GEORGE (b. 1755), an Irishman with a curious history, was born at Maynooth on the 14th of May 1755, the son of a working silversmith named Waldron. In 1771 he robbed his schoolmaster at Dublin and ran away from school, becoming a member of a touring theatrical company under the assumed name of Barrington. At Limerick races he joined the manager of the company in pocket-picking. The manager was detected and sentenced to transportation, and Barrington fled to London, where he assumed clerical dress and continued his pocket-picking. At

Covent Garden theatre he robbed the Russian prince Orlov of a snuff-box, said to be worth $[v.03 \ p.0437]$ £30,000. He was detected and arrested, but as Prince Orlov declined to prosecute, was discharged, though subsequently he was sentenced to three years' hard labour for pocket-picking at Drury Lane theatre. On his release he was again caught at his old practices and sentenced to five years' hard labour, but influence secured his release on the condition that he left England. He accordingly went for a short time to Dublin, and then returned to London, where he was once more detected pocket-picking, and, in 1790, sentenced to seven years' transportation. On the voyage out to Botany Bay a conspiracy was hatched by the convicts on board to seize the ship. Barrington disclosed the plot to the captain, and the latter, on reaching New South Wales, reported him favourably to the authorities, with the result that in 1792 Barrington obtained a warrant of emancipation (the first issued), becoming subsequently superintendent of convicts and later high constable of Paramatta. In 1796 a theatre was opened at Sydney, the principal actors being convicts, and Barrington wrote the prologue to the first production. This prologue has obtained a wide publicity. It begins:-

> "From distant climes, o'er widespread seas, we come, Though not with much *éclat* or beat of drum; True patriots we, for, be it understood, We left our country for our country's good."

Barrington died at a ripe old age at Paramatta, but the exact date is not on record. He was the author of A Voyage to Botany Bay (London, 1801); The History of New South Wales (London, 1802); The History of New Holland (London, 1808).

BARRINGTON, JOHN SHUTE, 1st Viscount (1678-1734), English lawyer and theologian, was the son of Benjamin Shute, merchant, and was born at Theobalds, in Hertfordshire, in 1678. He received part of his education at the university of Utrecht; and, after returning to England in 1698, studied law in the Inner Temple. In 1701 he published several pamphlets in favour of the civil rights of Protestant dissenters, to which class he belonged. On the recommendation of Lord Somers he was employed to induce the Presbyterians in Scotland to favour the union of the two kingdoms, and in 1708 he was rewarded for this service by being appointed to the office of commissioner of the customs. From this, however, he was removed on the change of administration in 1711; but his fortune had, in the meantime, been improved by the bequest of two considerable estates,—one of them left him by Francis Barrington of Tofts, whose name he assumed by act of parliament, the other by John Wildman of Becket. Barrington now stood at the head of the dissenters. On the accession of George I. he was returned to parliament for Berwickupon-Tweed; and in 1720 the king raised him to the Irish peerage, with the title of Viscount Barrington of Ardglass. But having unfortunately engaged in the Harburg lottery, one of the bubble speculations of the time, he was expelled from the House of Commons in 1723,—a punishment which was considered much too severe, and was thought to be due to personal malice of Walpole. In 1725 he published his principal work, entitled Miscellanea Sacra or a New Method of considering so much of the History of the Apostles as is contained in Scripture, 2 vols. 8vo,—afterwards reprinted with additions and corrections, in 3 vols. 8vo, 1770, by his son Shute. In the same year he published An Essay on the Several Dispensations of God to Mankind. He died on the 14th of December 1734.

BARRINGTON, SAMUEL (1720-1800), British admiral, was the fourth son of the 1st Viscount Barrington. He entered the navy at an early age and in 1747 had worked his way to a postcaptaincy. He was in continuous employment during the peace of 1748-1756, and on the outbreak of the Seven Years' War served with Hawke in the Basque roads in command of the "Achilles" (60). In 1759 the "Achilles" captured a powerful French privateer, after two hours' fighting. In the Havre-de-Grace expedition of the same year Barrington's ship carried the flag of Rear-Admiral Rodney, and in 1760 sailed with John Byron to destroy the Louisburg fortifications. At the peace in 1763 Barrington had been almost continuously afloat for twenty-two years. He was next appointed in 1768 to the frigate "Venus" as governor to the duke of Cumberland, who remained with him in all ranks from midshipman to rear-admiral. In 1778 the duke's flag-captain became rear-admiral and went to the West Indies, while in conjunction with the army he took the island of Santa Lucia from the French, and repulsed the attempt of the Comte d'Estaing to retake it. Superseded after a time by Byron, he remained as that officer's second-in-command and was present at Grenada and St. Kitts (6th and 22nd of July 1779). On his return home, he was offered, but refused, the command of the Channel fleet. His last active service was the relief of Gibraltar in October 1782. As admiral he flew his flag for a short time in 1790, but was not employed in the French revolutionary wars. He died in 1800.

See Ralfe, Naval Biographies, i. 120; Charnock, Biographia Navalis, vi. 10.

BARRINGTON, SHUTE (1734-1826), youngest son of the 1st Viscount Barrington, was educated at Eton and Oxford, and after holding some minor dignities was made bishop of Llandaff in 1769. In 1782 he was translated to Salisbury and in 1791 to Durham. He was a vigorous Protestant, though willing to grant Roman Catholics "every degree of toleration short of political power and establishment." He published several volumes of sermons and tracts, and wrote the political life of his brother, Viscount Barrington.

BARRINGTON, WILLIAM WILDMAN SHUTE, 2ND VISCOUNT (1717-1793), eldest son of the 1st Viscount Barrington, was born on the 15th of January 1717. Succeeding to the title in 1734, he spent some time in travel, and in March 1740 was returned to parliament as member for Berwick-upon-Tweed. Having taken his seat in the Irish House of Lords in 1745, he was

appointed one of the lords commissioners of the admiralty in 1746, and was one of the "managers" of the impeachment of Simon, Lord Lovat. In 1754 he became member of parliament for Plymouth, in 1755 was made a privy councillor and secretary at war, and in 1761 was transferred to the office of chancellor of the exchequer. In 1762 he became treasurer of the navy, and in 1765 returned to his former position of secretary at war. He retained this office until December 1778, and during four months in 1782 was joint postmaster-general. He married in 1740 Mary, daughter of Mr Henry Lovell, but left no children. He died at Becket on the 1st of February 1793, and was buried in Shrivenham church.

See Shute Barrington, Political Life of William Wildman, Viscount Barrington (London, 1814).

BARRISTER, in England and Ireland the term applied to the highest class of lawyers who have exclusive audience in all the superior courts, the word being derived from the "bar" (q.v.) in the law courts. Every barrister in England must be a member of one of the four ancient societies called Inns of Court, viz. Lincoln's Inn, the Inner and Middle Temples, and Gray's Inn, and in Ireland, of the King's Inns. The existence of the English societies as schools can be traced back to the 13th century, and their rise is attributed to the clause in Magna Carta, by which the Common Pleas were fixed at Westminster instead of following the king's court, and the professors of law were consequently brought together in London. Associations of lawyers acquired houses of their own in which students were educated in the common law, and the degrees of barrister (corresponding to apprentice or bachelor) and sergeant (corresponding to doctor) were conferred. These schools of law are now represented by the Inns of Court (q.v.).

Students are admitted as members of the Inns of Court, on paying certain fees and on passing a general (elementary) examination or (alternatively) producing evidence of having passed a public examination at a university; their subsequent call to the bar depends on their keeping twelve terms (of which there are four in each year), and passing certain further examinations (see ENGLISH LAW ad fin.). A term is "kept" by dining six times (three for a student whose name is on the books of a university) in hall. This is a relic of the older system in which examinations were not included, the only requisite being a certificate from a barrister that the student had read for twelve months in his chambers. Dining in hall then applied a certain social test, which has now become unmeaning. The profession of barrister is open to almost every one; but no person connected with the law in any inferior capacity or who is a chartered or professional accountant, can enter an Inn of Court as a student until he has entirely and bona fide ceased to act or practise in such capacity. Some of the Inns also make a restriction that their members shall not be engaged in trade. A form of admission has to be filled up, containing a declaration to this effect, and mentioning inter alia the age, nationality, condition in life and occupation of the applicant. Previous to the student's call this declaration must be repeated, and he must further declare that he is not in holy orders, has not held any clerical preferment and has not performed any clerical functions during the year preceding. Subject to the above, practising solicitors of not less than five years' standing may be called to the bar without keeping any terms, upon passing the necessary examinations, and, per contra, a barrister of the same standing may, without any period of apprenticeship, become a solicitor upon passing the final examination for solicitors. Irish barristers of three years' standing may be called to the English bar without passing any examination upon keeping three terms, and so also may barristers of those colonies where the professions of barrister and solicitor are still kept distinct. No one can become a barrister till he is twenty-one years old.

The benchers of the different Inns of Court have the right of rejecting any applicant for membership with or without cause assigned; and for sufficient reasons, subject to an appeal to the common-law judges as visitors of the Inns, they may refuse to call a student to the bar, or may expel from their society or from the profession ("dis-bar" or "dis-bench") even barristers or benchers. The benchers appear to take cognizance of any kind of misconduct, whether professional or not, which they may deem unworthy of the rank of barrister. The grade of barrister comprehends the attorney-general and solicitor-general (appointed by and holding office solely at the will of the government of the day), who rank as the heads of the profession, king's counsel and ordinary practitioners, sometimes technically known as "utter barristers."

The peculiar business of barristers is the advocacy of causes in open court, but in England a great deal of other business falls into their hands. They are the chief conveyancers, and the pleadings (i.e. the counter statements of parties previous to joining issue) are in all but the simplest cases drafted by them. There was formerly, indeed, a separate class of conveyancers and special pleaders, being persons who kept the necessary number of terms qualifying for a call but who, instead of being called, took out licences, granted for one year only, but renewable, to practise under the bar, but now conveyancing and special pleading form part of the ordinary work of a junior barrister. The higher rank among barristers is that of king's or queen's counsel. They lead in court, and give opinions on cases submitted to them, but they do not accept conveyancing or pleading, nor do they admit pupils to their chambers. Precedence among king's counsel, as well as among outer barristers, is determined by seniority.^[1] The old order of serjeants-at-law (q.v.) who ranked after king's counsel, is now extinct. Although every barrister has a right to practise in any court in England, each special class of business has its own practitioners, so that the bar may almost be said to be divided into several professions. The most marked distinction is that between barristers practising in chancery and barristers practising in the courts of common law. The fusion of law and equity brought about by the Judicature Acts 1873 and 1875 was expected in course of time to break down this distinction; but to a large extent the separation between these two great branches of the profession remains. There are

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also subordinate distinctions in each branch. Counsel at common law attach themselves to one or other of the circuits into which England is divided, and may not practise elsewhere unless under special conditions. In chancery the king's counsel for the most part restrict themselves to one or other of the courts of the chancery division. Business before the court of probate, divorce and admiralty, the privy council and parliamentary committees, exhibits, though in a less degree, the same tendency to specialization. In some of the larger provincial towns there are also local bars of considerable strength. The bar of Ireland exhibits in its general arrangements the same features as the bar of England. For the Scottish bar, see under Advocates, Faculty of. There is no connexion whatever between the Scottish and English bars. A distinctive dress is worn by barristers when attending the courts, consisting of a stuff gown, exchanged for one of silk (whence the expression "to take silk") when the wearer has attained the rank of king's counsel, both classes also having wigs dating in pattern and material from the 18th century.

Counsel is not answerable for anything spoken by him relative to the cause in hand and suggested in the client's instructions, even though it should reflect on the character of another and prove absolutely groundless, but if he mention an untruth of his own invention, or even upon instructions if it be impertinent to the matter in hand, he is then liable to an action from the party injured. Counsel may also be punished by the summary power of the court or judge as for a contempt, and by the benchers of the inn to which he may belong on cause shown.

The rank of barrister is a necessary qualification for nearly all offices of a judicial character, and a very usual qualification for other important appointments. Not only the judgeships in the superior courts of law and equity in England and in her colonies, but nearly all the magistracies of minor rank—recorderships, county court judgeships, &c.—are restricted to the bar. The result is a unique feature in the English system of justice, viz. the perfect harmony of opinion and interest between the bar as a profession and all degrees of the judicial bench. Barristers have the rank of esquires, and are privileged from arrest whilst in attendance on the superior courts and on circuit, and also from serving on juries whilst in active practice.

Revising Barristers are counsel of not less than seven years' standing appointed to revise the lists of parliamentary voters.

Barristers cannot maintain an action for their fees, which are regarded as gratuities, nor can they, by the usage of the profession, undertake a case without the intervention of a solicitor, except in criminal cases, where a barrister may be engaged directly, by having a fee given him in open court, nor is it competent for them to enter into any contract for payment by their clients with respect to litigation.

See J. R. V. Marchant, Barrister-at-law: an Essay on the legal position of Counsel in England (1905).

[1] A king's counsel is appointed by letters patent to be "one of His Majesty's counsel learned in the law." The appointment rests with the lord chancellor, to whom the barrister desiring a silk gown makes application. There is no definite time required to elapse between "call" and application for a seat within the bar, but it is generally understood that a barrister must be of at least ten years' standing before he is appointed a king's counsel. The first king's counsel was Sir Francis Bacon, who was appointed by Queen Elizabeth "queen's counsel extraordinary," and received a payment, by way of "pledge and fee," of £40 a year, payable half-yearly. Succeeding king's counsel received a similar payment, until its abolition in 1831. There was not another appointment of a king's counsel until 1668, when Lord Chancellor Francis North was so honoured. From 1775 king's counsel may be said to have become a regular order. Their number was very small so late as the middle of the 19th century (20 in 1789; 30 in 1810; 28 in 1850), but at the beginning of the 20 century there were over 250. A king's counsel may not, unless by special licence, take a brief against the crown, but such a licence is never refused unless the crown desires his services in the case.

BARROIS, CHARLES (1851-), French geologist, was born at Lille on the 21st of April 1851, and educated at the college in that town, where he studied geology under Prof. Jules Gosselet and qualified as D. ès Sc. To this master he dedicated his first comprehensive work, *Recherches sur le terrain crétacé supérieur de l'Angleterre et de l'Irlande*, published in the *Mémoires de la société géologique du Nord* in 1876. In this essay the palaeontological zones in the Chalk and Upper Greensand of Britain were for the first time marked out in detail, and the results of Dr Barrois's original researches have formed the basis of subsequent work, and have in all leading features been confirmed. In 1876 Dr Barrois was appointed a collaborateur to the French Geological Survey, and in 1877 professor of geology in the university of Lille. In other memoirs, among which may be mentioned those on the Cretaceous rocks of the Ardennes and of the Basin of Oviedo, Spain; on the (Devonian) Calcaire d'Erbray; on the Palaeozoic rocks of Brittany and of northern Spain; and on the granitic and metamorphic rocks of Brittany, Dr Barrois has proved himself an accomplished petrologist as well as palaeontologist and field-geologist. In 1881 he was awarded the Bigsby medal, and in 1901 the Wollaston medal by the Geological Society of London. He was chosen member of the Institute (Academy of Sciences) in 1904.

BARROS, JOÃO DE (1496-1570), called the Portuguese Livy, may be said to have been the first great historian of his country. Educated in the palace of King Manoel, he early conceived the idea of writing history, and, to prove his powers, composed, at the age of twenty, a romance of chivalry, the *Chronicle of the Emperor Clarimundo*, in which he is said to have had the assistance

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of Prince John, afterwards King John III. The latter, on ascending the throne, gave Barros the captaincy of the fortress of St George of Elmina, whither he proceeded in 1522, and he obtained in 1525 the post of treasurer of the India House, which he held until 1528. The pest of 1530 drove him from Lisbon to his country house near Pombal, and there he finished a moral dialogue, Rhopica Pneuma, which met with the applause of the learned Juan Luis Vives. On his return to Lisbon in 1532 the king appointed Barros factor of the India and Mina House—positions of great responsibility and importance at a time when Lisbon was the European emporium for the trade of the East. Barros proved a good administrator, displaying great industry and a disinterestedness rare in that age, with the result that he made but little money where his predecessors had amassed fortunes. At this time, John III., wishful to attract settlers to Brazil, divided it up into captaincies and gave that of Maranhão to Barros, who, associating two partners in the enterprise with himself, prepared an armada of ten vessels, carrying nine hundred men, which set sail in 1539. Owing to the ignorance of the pilots, the whole fleet suffered shipwreck, which entailed serious financial loss on Barros, yet not content with meeting his own obligations, he paid the debts of those who had perished in the expedition. During all these busy years he had continued his studies in his leisure hours, and shortly after the Brazilian disaster he offered to write a history of the Portuguese in India, which the king accepted. He began work forthwith, but, before printing the first part, he again proved his pen by publishing a Portuguese grammar (1540) and some more moral Dialogues. The first of the Decades of his Asia appeared in 1552, and its reception was such that the king straightway charged Barros to write a chronicle of King Manoel. His many occupations, however, prevented him from undertaking this book, which was finally composed by Damião de Goes (q.v.). The Second Decade came out in 1553 and the Third in 1563, but the Fourth and final one was not published until 1615, long after the author's death. In January 1568 Barros retired from his remunerative appointment at the India House, receiving the rank of fidalgo together with a pension and other pecuniary emoluments from King Sebastian, and died on the 20th of October 1570. A man of lofty character, he preferred leaving his children an example of good morals and learning to bequeathing them a large pecuniary inheritance, and, though he received many royal benefactions, they were volunteered, never asked for. As an historian and a stylist Barros deserves the high fame he has always enjoyed. His Decades contain the early history of the Portuguese in Asia and reveal careful study of Eastern historians and geographers, as well as of the records of his own country. They are distinguished by clearness of exposition and orderly arrangement. His style has all the simplicity and grandeur of the masters of historical writing, and the purity of his diction is incontestable. Though, on the whole, impartial, Barros is the narrator and apologist of the great deeds of his countrymen, and lacks the critical spirit and intellectual acumen of Damião de Goes. Diogo do Couto continued the Decades, adding nine more, and a modern edition of the whole appeared in Lisbon in 14 vols. in 1778-1788. The title of Barros's work is Da Asia de João de Barros, dos feitos que os Portuguezes fizeram no descubrimento e conquista dos mares e terras do Oriente, and the edition is accompanied by a volume containing a life of Barros by the historian Manoel Severim de Faria and a copious index of all the Decades. An Italian version in 2 vols. appeared in Venice in 1561-1562 and a German in 5 vols. in 1821. Clarimundo has gone through the following editions: 1522, 1555, 1601, 1742, 1791 and 1843, all published in Lisbon. It influenced Francisco de Moraes (q.v.); cf. Purser, Palmerin of England, Dublin, 1904, pp. 440 et seq.

The minor works of Barros are described by Innocencio da Silva: *Diccionario Bibliographico Portuguez*, vol. iii. pp. 320-323 and vol. x. pp. 187-189, and in Severim de Faria's *Life*, cited above. A compilation of Barros's *Varia* was published by the visconde de Azevedo (Porto, 1869).

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BARROT, CAMILLE HYACINTHE ODILON (1791-1873), French politician, was born at Villefort (Lozère) on the 19th of September 1791. He belonged to a legal family, his father, an advocate of Toulouse, having been a member of the Convention who had voted against the death of Louis XVI. Odilon Barrot's earliest recollections were of the October insurrection of 1795. He was sent to the military school of Saint-Cyr, but presently removed to the Lycée Napoleon to study law and was called to the Parisian bar in 1811. He was placed in the office of the conventionel Jean Mailhe, who was advocate before the council of state and the court of cassation and was proscribed at the second restoration. Barrot eventually succeeded him in both positions. His dissatisfaction with the government of the restoration was shown in his conduct of some political trials. For his opposition in 1820 to a law by which any person might be arrested and detained on a warrant signed by three ministers, he was summoned before a court of assize, but acquitted. Although intimate with Lafayette and others, he took no actual share in their schemes for the overthrow of the government, but in 1827 he joined the association known as Aide-toi, le ciel t'aidera. He presided over the banquet given by the society to the 221 deputies who had signed the address of March 1830 to Charles X., and threatened to reply to force by force. After the ordinances of the 26th of July 1830, he joined the National Guard and took an active part in the revolution. As secretary of the municipal commission, which sat at the hôtel-de-ville and formed itself into a provisional government, he was charged to convey to the chamber of deputies a protest embodying the terms which the advanced Liberals wished to impose on the king to be elected. He supported the idea of a constitutional monarchy against the extreme Republicans, and he was appointed one of the three commissioners chosen to escort Charles X. out of France. On his return he was nominated prefect of the department of the Seine. His concessions to the Parisian mob and his extreme gentleness towards those who demanded the prosecution of the ministers of Charles X. led to an unflattering comparison with Jérôme Pétion under similar circumstances. Louis Philippe's government was far from satisfying his desires for reform, and he persistently urged the "broadening of the bases of the monarchy," while he protested his loyalty

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to the dynasty. He was returned to the chamber of deputies for the department of Eure in 1831. The day after the demonstration of June 1832 on the occasion of the funeral of General Lamarque, he made himself indirectly the mouthpiece of the Democrats in an interview with Louis Philippe, which is given at length in his Mémoires. Subsequently, in pleading before the court of cassation on behalf of one of the rioters, he secured the annulling of the judgments given by the council of war. The death of the duke of Orleans in 1842 was a blow to Barrot's party, which sought to substitute the regency of the duchess of Orleans for that of the duke of Nemours in the event of the succession of the count of Paris. In 1846 Barrot made a tour in the Near East, returning in time to take part a second time in the preliminaries of revolution. He organized banquets of the disaffected in the various cities of France, and demanded electoral reform to avoid revolution. He did not foresee the strength of the outbreak for which his eloquence had prepared the way, and clung to the programme of 1830. He tried to support the regency of the duchess in the chamber on the 24th of February, only to find that the time was past for halfmeasures. He acquiesced in the republic and gave his adhesion to General Cavaignac. He became the chief of Louis Napoleon's first ministry in the hope of extracting Liberal measures, but was dismissed in 1849 as soon as he had served the president's purpose of avoiding open conflict. After the coup d'état of December 1851 he was one of those who sought to accuse Napoleon of high treason. He was imprisoned for a short time and retired from active politics for some ten years. He was drawn once more into affairs by the hopes of reform held out by Émile Ollivier, accepting in 1869 the presidency of an extra-parliamentary committee on decentralization. After the fall of the empire he was nominated by Thiers, whom he had supported under Louis Philippe, president of the council of state. But his powers were now failing, and he had only filled his new office for about a year when he died at Bougival on the 6th of August 1873. He had been sufficiently an optimist to believe in the triumph of the liberal but non-republican institutions dear to him under the restoration, under Louis Philippe and Louis Napoleon successively. He was unable to foresee and unwilling to accept the consequences of his political agitation in 1830 and 1848, and in spite of his talents and acknowledged influence he thus failed to secure the honours won by more uncompromising politicians. He was described by Thureau-Dangin as "le plus solennel des indécis, le plus méditatif des irréfléchis, le plus heureux des ambitieux, le plus austère des courtisans de la foule."

His personal relations with Louis Philippe and Napoleon, with his views on the events in which he was concerned, are described in the four volumes of his *Mémoires*, edited by Duvergier de Hauranne in 1875-1876. See also Thureau-Dangin, *Hist. de la monarchie de juillet*.

BARROW, ISAAC (1630-1677), English mathematician and divine, was the son of Thomas Barrow, a linen-draper in London, belonging to an old Suffolk and Cambridgeshire family. His uncle was Bishop Isaac Barrow of St Asaph (1614-1680). He was at first placed for two or three years at the Charterhouse school. There, however, his conduct gave but little hopes of his ever succeeding as a scholar. But after his removal from this establishment to Felsted school in Essex, where Martin Holbeach was master, his disposition took a happier turn; and having soon made considerable progress in learning, he was in 1643 entered at St Peter's College, and afterwards at Trinity College, Cambridge, where he applied himself to the study of literature and science, especially of natural philosophy. He at first intended to adopt the medical profession, and made some progress in anatomy, botany and chemistry, after which he studied chronology, geometry and astronomy. He then travelled in France and Italy, and in a voyage from Leghorn to Smyrna gave proofs of great personal bravery during an attack made by an Algerine pirate. At Smyrna he met with a kind reception from the English consul, Mr Bretton, upon whose death he afterwards wrote a Latin elegy. From this place he proceeded to Constantinople, where he received similar civilities from Sir Thomas Bendish, the English ambassador, and Sir Jonathan Dawes, with whom he afterwards contracted an intimate friendship. While at Constantinople he read and studied the works of St Chrysostom, whom he preferred to all the other Fathers. He resided in Turkey somewhat more than a year, after which he proceeded to Venice, and thence returned home through Germany and Holland in 1659.

Immediately on his reaching England he received ordination from Bishop Brownrig, and in 1660 he was appointed to the Greek professorship at Cambridge. When he entered upon this office he intended to have prelected upon the tragedies of Sophocles; but he altered his intention and made choice of Aristotle's rhetoric. His lectures on this subject, having been lent to a friend who never returned them, are irrecoverably lost. In July 1662 he was elected professor of geometry in Gresham College, on the recommendation of Dr John Wilkins, master of Trinity College and afterwards bishop of Chester; and in May 1663 he was chosen a fellow of the Royal Society, at the first election made by the council after obtaining their charter. The same year the executors of Henry Lucas, who, according to the terms of his will, had founded a mathematical chair at Cambridge, fixed upon Barrow as the first professor; and although his two professorships were not inconsistent with each other, he chose to resign that of Gresham College, which he did on the 20th of May 1664. In 1669 he resigned his mathematical chair to his pupil, Isaac Newton, having now determined to renounce the study of mathematics for that of divinity. Upon quitting his professorship Barrow was only a fellow of Trinity College; but his uncle gave him a small sinecure in Wales, and Dr Seth Ward, bishop of Salisbury, conferred upon him a prebend in that church. In the year 1670 he was created doctor in divinity by mandate; and, upon the promotion of Dr Pearson to the see of Chester, he was appointed to succeed him as master of Trinity College by the king's patent, bearing the date of the 13th of February 1672. In 1675 Dr Barrow was chosen vice-chancellor of the university. He died on the 4th of May 1677, and was interred in Westminster Abbey, where a monument, surmounted by his bust, was soon after erected by the contributions of his friends.

By his English contemporaries Barrow was considered a mathematician second only to Newton. Continental writers do not place him so high, and their judgment is probably the more correct one. He was undoubtedly a clear-sighted and able mathematician, who handled admirably the severe geometrical method, and who in his *Method of Tangents* approximated to the course of reasoning by which Newton was afterwards led to the doctrine of ultimate ratios; but his substantial contributions to the science are of no great importance, and his lectures upon elementary principles do not throw much light on the difficulties surrounding the border-land between mathematics and philosophy. (See Infinitesimal Calculus.) His *Sermons* have long enjoyed a high reputation; they are weighty pieces of reasoning, elaborate in construction and ponderous in style.

His scientific works are very numerous. The most important are:—Euclid's Elements; Euclid's Data; Optical Lectures, read in the public school of Cambridge; Thirteen Geometrical Lectures; The Works of Archimedes, the Four Books of Apollonius's Conic Sections, and Theodosius's Spherics, explained in a New Method; A Lecture, in which Archimedes' Theorems of the Sphere and Cylinder are investigated and briefly demonstrated; Mathematical Lectures, read in the public schools of the university of Cambridge. The above were all written in Latin. His English works have been collected and published in four volumes folio.

See Ward, *Lives of the Gresham Professors*, and Whewell's biography prefixed to the 9th volume of Napier's edition of Barrow's *Sermons*.

BARROW, SIR JOHN (1764-1848), English statesman, was born in the village of Dragley Beck in the parish of Ulverston in Lancashire, on the 19th of June 1764. He started in life as superintending clerk of an iron foundry at Liverpool and afterwards taught mathematics at a school in Greenwich. Through the interest of Sir George Staunton, to whose son he taught mathematics, he was attached on the first British embassy to China as comptroller of the household to Lord Macartney. He soon acquired a good knowledge of the Chinese language, on which he subsequently contributed interesting articles to the *Quarterly Review*; and the account of the embassy published by Sir George Staunton records many of Barrow's valuable contributions to literature and science connected with China.

Although Barrow ceased to be officially connected with Chinese affairs after the return of the embassy in 1794, he always took much interest in them, and on critical occasions was frequently consulted by the British government. In 1797 he accompanied Lord Macartney, as private secretary, in his important and delicate mission to settle the government of the newly acquired colony of the Cape of Good Hope. Barrow was entrusted with the task of reconciling the Boers and Kaffirs and of reporting on the country in the interior. On his return from his journey, in the course of which he visited all parts of the colony, he was appointed auditor-general of public accounts. He now decided to settle in South Africa, married Anne Maria Trüter, and in 1800 bought a house in Cape Town. But the surrender of the colony at the peace of Amiens (1802) upset this plan. He returned to England in 1804, was appointed by Lord Melville second secretary to the admiralty, a post which he held for forty years. He enjoyed the esteem and confidence of all the eleven chief lords who successively presided at the admiralty board during that period, and more especially of King William IV. while lord high admiral, who honoured him with tokens of his personal regard. Barrow was a fellow of the Royal Society, and in 1821 received the degree of LL.D. from Edinburgh University. A baronetcy was conferred on him by Sir Robert Peel in 1835. He retired from public life in 1845 and devoted himself to writing a history of the modern Arctic voyages of discovery (1846), of which he was a great promoter, as well as his autobiography, published in 1847. He died suddenly on the 23rd of November 1848.

Besides the numerous articles in the *Quarterly Review* already mentioned, Barrow published among other works, *Travels in China* (1804); *Travels into the Interior of South Africa* (1806); and lives of Lord Macartney (1807), Lord Anson (1839), Lord Howe (1838). He was also the author of several valuable contributions to the seventh edition of the *Encyclopaedia Britannica*.

See Memoir of John Barlow, by G. F. Staunton (1852).

BARROW, a river of south-eastern Ireland. It rises in the Slieve Bloom mountains, and flows at first easterly and then almost due south, until, on joining the Suir, it forms the estuary of the south coast known as Waterford Harbour. Including the 12 m. of the estuary, the length of its valley is rather more than 100 m., without counting the lesser windings of the river. The total area of drainage to Waterford Harbour (including the basin of the Suir) is 3500 sq. m., and covers the whole of the county Kilkenny, with parts of Waterford, Cork and Limerick, Tipperary, Carlow, King's and Queen's counties. The chief towns on the banks of the Barrow are Athy (where it becomes navigable and has a junction with the Grand Canal), Carlow, Bagenalstown and New Ross. The chief affluent is the Nore, which it receives from the north-west a little above New Ross. The scenery on its banks is in parts very beautiful.

BARROW (from A.S. *beorh*, a mount or hillock), a word found occasionally among place-names in England applied to natural eminences, but generally restricted in its modern application to denote an ancient grave-mound. The custom of constructing barrows or mounds of stone or earth over the remains of the dead was a characteristic feature of the sepulchral systems of primitive times. Originating in the common sentiment of humanity, which desires by some visible memorial to honour and perpetuate the memory of the dead, it was practised alike by peoples of high and of low development, and continued through all the stages of culture that preceded the introduction of Christianity. The primary idea of sepulture appears to have been the provision of

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a habitation for the dead; and thus, in its perfect form, the barrow included a chamber or chambers where the tenant was surrounded with the prized possessions of his previous life. A common feature of the earlier barrows is the enclosing fence, which marked off the site from the surrounding ground. When the barrow was of earth, this was effected by an encircling trench or a low *vallum*. When the barrow was a stone structure, the enclosure was usually a circle of standing stones. Sometimes, instead of a chamber formed above ground, the barrow covered a pit excavated for the interment under the original surface. In later times the mound itself was frequently dispensed with, and the interments made within the enclosure of a trench, a *vallum* or a circle of standing stones. Usually the great barrows occupy conspicuous sites; but in general the external form is no index to the internal construction and gives no definite indication of the nature of the sepulchral usages. Thus, while the long barrow is characteristic of the Stone Age, it is impossible to tell without direct examination whether it may be chambered or unchambered, or whether the burials within it may be those of burnt or of unburnt bodies.

In England the long barrow usually contains a single chamber, entering by a passage underneath the higher and wider end of the mound. In Denmark the chambers are at irregular intervals along the body of the mound, and have no passages leading into them. The long barrows of Great Britain are often from 200 to 400 ft. in length by 60 to 80 ft. wide. Their chambers are rudely but strongly built, with dome-shaped roofs, formed by overlapping the successive courses of the upper part of the side walls. In Scandinavia, on the other hand, such dome-roofed chambers are unknown, and the construction of the chambers as a rule is megalithic, five or six monoliths supporting one or more capstones of enormous size. Such chambers, denuded of the covering mound, or over which no covering mound has been raised, are popularly known in England as "cromlechs" and in France as "dolmens" (see Stone Monuments). The prevailing mode of sepulture in all the different varieties of these structures is by the deposit of the body in a contracted position, accompanied by weapons and implements of stone, occasionally by ornaments of gold, jet or amber. Vessels of clay, more or less ornate in character, which occur with these early interments of unburnt bodies, have been regarded as food-vessels and drinking-cups, differing in character and purpose from the cinerary urns of larger size in which the ashes of the dead were deposited after cremation.

The custom of burning the body commenced in the Stone Age, before the long barrow or the dolmen had passed out of use. While cremation is rare in the long barrows of the south of England, it is the rule in those of Yorkshire and the north of Scotland. In Ireland, where the long barrow form is all but unknown, the round barrow or chambered cairn prevailed from the earliest Pagan period till the introduction of Christianity. The Irish barrows occur in groups in certain localities, some of which seem to have been the royal cemeteries of the tribal confederacies, whereof eight are enumerated in an ancient Irish manuscript, the Leabhar na h-Uidhri, compiled c. A.D. 1100. The best-known of these is situated on the banks of the Boyne above Drogheda, and consists of a group of the largest cairns in Ireland. One, at New Grange, is a huge mound of stones and earth, over 300 ft. in diameter and 70 ft. in height. Around its base are the remains of a circle of large standing stones. The chamber, which is 20 ft. high in the centre, is reached by a passage about 70 ft. in length. In the Loughcrew Hills, Co. Meath, there is a group of about thirty stone barrows or cairns, mostly chambered, their bases measuring from 5 or 6 to 60 yds. in diameter. They are unusually interesting from the fact that many of the exposed slabs in the walls of the chambers are ornamented with spirals and other devices, rudely incised. As in the case of the long barrows, the traditional form of the circular, chambered barrow was retained through various changes in the sepulchral customs of the people. It was the natural result of the practice of cremation, however, that it should induce a modification of the barrow structure. The chamber, no longer regarded as a habitation to be tenanted by the deceased, became simply a cist for the reception of the urn which held his ashes. The degradation of the chamber naturally produced a corresponding degradation of the mound which covered it, and the barrows of the Bronze Age, in which cremation was common, are smaller and less imposing than those of the Stone Age, but often surprisingly rich in the relics of the life and of the art workmanship of the time. In addition to the varied and beautiful forms of implements and weapons—frequently ornamented with a high degree of artistic taste—armlets and other personal ornaments in gold, amber, jet and bronze are not uncommon. The barrows of the bronze period, like some of those of the Stone Age, appear to have been used as tribal or family cemeteries. In Denmark as many as seventy deposits of burnt interments have been observed in a single mound, indicating its use as a burying-place throughout a long succession of years.

In the Iron Age there was less uniformity in the burial customs. In some of the barrows in central France, and in the wolds of Yorkshire, the interments include the arms and accoutrements of a charioteer, with his chariot, harness and horses. In Scandinavia a custom, alluded to in the sagas, of burying the viking in his ship, drawn up on land, and raising a barrow over it, is exemplified by the ship-burials discovered in Norway. The ship found in the Gokstad mound was 78 ft. long, and had a mast and sixteen pairs of oars. In a chamber abaft the mast the viking had been laid, with his weapons, and together with him were buried twelve horses, six dogs and a peacock. An interesting example of the great timber-chambered barrow is that at Jelling in Jutland, known as the barrow of Thyre Danebod, queen of King Gorm the Old, who died about the middle of the 10th century. It is a mound about 200 ft. in diameter, and over 50 ft. in height, containing a chamber 23 ft. long, 8 ft. wide and 5 ft. high, formed of massive slabs of oak. Though it had been entered and plundered in the middle ages, a few relics were found when it was reopened, among which were a silver cup, ornamented with the interlacing work characteristic of the time and some personal ornaments. It is highly illustrative of the tenacity with which the ancient sepulchral usages were retained even after the introduction of Christianity that King Harold, son

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and successor of Gorm the Old, who is said to have christianized all Denmark and Norway, followed the pagan custom of erecting a chambered tumulus over the remains of his father, on the summit of which was placed a rude pillar-stone, bearing on one side the memorial inscription in runes, and on the other a representation of the Saviour of mankind distinguished by the crossed nimbus surrounding the head. The so-called Kings' Hows at Upsala in Sweden rival those of Jelling in size and height. In the chamber of one, opened in 1829, there was found an urn full of calcined bones; and along with it were ornaments of gold showing the characteristic workmanship of the 5th and 6th centuries of the Christian era. Along with the calcined human bones were bones of animals, among which those of the horse and the dog were distinguished.

Comparing the results of the researches in European barrows with such notices of barrow-burial as may be gleaned from early writings, we find them mutually illustrative.

The Homeric account of the building of the barrow of Hector (*II.* xxiv.) brings vividly before us the scene so often suggested by the examination of the tumuli of prehistoric times. During nine days wood was collected and brought, in carts drawn by oxen, to the site of the funeral pyre. Then the pyre was built and the body laid upon it. After burning for twenty-four hours the smouldering embers were extinguished with libations of wine. The white and calcined bones were then picked out of the ashes by the friends and placed in a metallic urn, which was deposited in a hollow grave or cist and covered over with large well-fitting stones. Finally, a barrow of great magnitude was heaped over the remains and the funeral feast was celebrated. The obsequies of Achilles, as described in the *Odyssey*, were also celebrated with details which are strikingly similar to those observed in tumuli both of the Bronze and Iron Ages. The body was brought to the pile in an embroidered robe and jars of unguents and honey were placed beside it. Sheep and oxen were slaughtered at the pile. The incinerated bones were collected from the ashes and placed in a golden urn along with those of Patroclus, Achilles's dearest friend. Over the remains a great and shapely mound was raised on the high headland, so that it might be seen from afar by future generations of men.

Herodotus, describing the funeral customs of the Scythians, states that, on the death of a chief, the body was placed upon a couch in a chamber sunk in the earth and covered with timber, in which were deposited all things needful for the comfort of the deceased in the other world. One of his wives was strangled and laid beside him, his cup-bearer and other attendants, his charioteer and his horses were killed and placed in the tomb, which was then filled up with earth and an enormous mound raised high over all. The barrows which cover the plains of ancient Scythia attest the truth of this description. A Siberian barrow, described by Demidov, contained three contiguous chambers of unhewn stone. In the central chamber lay the skeleton of the ancient chief, with his sword, his spear, his bow and a quiver full of arrows. The skeleton reclined upon a sheet of pure gold, extending the whole length of the body, which had been wrapped in a mantle broidered with gold and studded with precious stones. Over it was extended another sheet of pure gold. In a smaller chamber at the chief's head lay the skeleton of a female, richly attired, extended upon a sheet of pure gold and similarly covered with a sheet of the same metal. A golden chain adorned her neck and her arms were encircled with bracelets of pure gold. In a third chamber, at the chief's feet, lay the skeleton of his favourite horse with saddle, bridle and stirrups.

So curiously alike in their general features were the sepulchral usages connected with barrow-burial over the whole of Europe, that we find the Anglo-Saxon Saga of Beowulf describing the chambered tumulus with its gigantic masonry "held fast on props, with vaults of stone," and the passage under the mound haunted by a dragon, the guardian of the treasures of heathen gold which it contained. Beowulf's own burial is minutely described in terms which have a strong resemblance to the parallel passages in the *Iliad* and *Odyssey*. There is first the preparation of the pile, which is hung round with helmets, shields and coats of mail. Then the corpse is brought and laid in the midst; the pile is kindled and the roaring flame rises, mingled with weeping, till all is consumed. Then, for ten long days, the warriors labour at the rearing of his mighty mound on the headland, high and broad, to be seen afar by the passers-by on land and sea.

The pyramids of Egypt, the mausolea of the Lydian kings, the circular, chambered sepulchres of Mycenae, and the Etruscan tombs at Caere and Volci, are lineally descended from the chambered barrows of prehistoric times, modified in construction according to the advancement of architectural art at the period of their erection. There is no country in Europe destitute of more or less abundant proofs of the almost universal prevalence of barrow-burial in early times. It can also be traced on both sides of the basin of the Mediterranean, and from Asia Minor across the continent to India, China and Japan.

In the new world as well as in the old, similar customs prevailed from a very remote period. In the great plains of North America the dead were buried in barrows of enormous magnitude, which occasionally present a remarkable similarity to the barrows of Great Britain. In these mounds cremation appears more frequently than inhumation; and both are accompanied by implements, weapons and ornaments of stone and bone. The pottery accompanying the remains is often elaborately ornamented, and the mound builders were evidently possessed of a higher development of taste and skill than is evinced by any of the modern aboriginal races, by whom the mounds and their contents are regarded as utterly mysterious.

It is not to be wondered at that customs so widely spread and so deeply rooted as those connected with barrow-burial should have been difficult to eradicate. In fact, compliance with the Christian practice of inhumation in the cemeteries sanctioned by the church, was only enforced

in Europe by capitularies denouncing the punishment of death on those who persisted in burying their dead after the pagan fashion or in the pagan mounds. Yet even in the middle ages kings of Christian countries were buried with their swords and spears, and queens with their spindles and ornaments; the bishop was laid in his grave with his crozier and comb; the priest with his chalice and vestments; and clay vessels filled with charcoal (answering to the urns of heathen times) are found in the churches of France and Denmark.

Authorities.—Canon W. Greenwell, *British Barrows* (London, 1877); Dr J. Thurnam, "On Ancient British Barrows," in *Archaeologia*, vols. 42, 43 (1869); J. R. Mortimer, *Forty Years' Researches in Burial Mounds of East Yorkshire* (London, 1905); J. Anderson, *Scotland in Pagan Times* (Edinburgh, 1886); Dr T. H. Bryce, "Records of Explorations among the Cairns of Arran and Bute," in *Proceedings of the Society of Antiquaries of Scotland*, vols. 36, 37, 38 (1901-1903); W. C. Borlase, *The Dolmens of Ireland* (London, 1897); *Dictionnaire archéologique de la Gaule* (Paris, 1875); A. P. Madsen, *Gravhoie og Gravfund fra Stenalderen i Danmark* (Copenhagen, 1900); S. Müller, *Nordische Altertumskunde aus Dänemark und Schleswig* (Strassburg, 1897); O. Montelius, *The Civilization of Sweden in Heathen Times* (London, 1888), and *Der Orient und Europa* (Stockholm, 1899); E. Cartailhac, *Les Âges préhistoriques de l'Espagne et du Portugal* (Paris, 1886); W. Gowland, "The Dolmens and Burial Mounds in Japan," in *Archaeologia*, vol. 55 (1897); C. Thomas, "Report on the Mound Explorations of the Bureau of Ethnology" (*Twelfth Annual Report* for 1890-1891, Washington, 1894.)

(J. An.)

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BARROWE, HENRY (?1550-1593), English Puritan and Separatist, was born about 1550, at Shipdam, Norfolk, of a family related by marriage to the lord keeper Bacon, and probably to Aylmer, bishop of London. He matriculated at Clare Hall, Cambridge, in November 1566, and graduated B.A. in 1569-1570. Afterwards he "followed the court" for some time, leading a frivolous if not licentious life. He was a member of Gray's Inn for a few years from 1576, but was never called to the bar. About 1580 or 1581 he was deeply impressed by a sermon, whereupon he retired to the country, and was led by study and meditation to the strictest form of Puritanism. Subsequently, in what manner is not known, he came into intimate relations with John Greenwood, the Separatist leader, whose views (probably due, in part at least, to Browne's influence) he adopted without reserve. Though not strictly resident in London at this time, he was associated with "the brethren of the Separation" there, in whose secret meetings his natural earnestness and eloquence made him conspicuous. Greenwood having been imprisoned in the Clink, Barrowe came from the country to visit him, and on the 19th of November 1586 was detained by the gaoler and brought before Archbishop Whitgift. He insisted on the illegality of this arrest, refused either to take the ex officio oath or to give bail for future appearance, and was committed to the Gatehouse. After nearly six months' detention and several irregular examinations before the high commissioners, he and Greenwood were formally indicted (May 1587) for recusancy under an act originally directed against Papists. They were ordered to find heavy bail for comformity, and to remain in the Fleet Prison until it was forthcoming. Barrowe continued a prisoner for the remainder of his life, nearly six years, sometimes in close confinement, sometimes having "the liberty of the prison." He was subjected to several more examinations, once before the privy council at Whitehall on the 18th of March 1588, as a result of petition to the queen. On these occasions he vigorously maintained the principle of separatism, denouncing the prescribed ritual of the Church as "a false worship," and the bishops as oppressors and persecutors. During his imprisonments he was engaged in written controversy with Robert Browne (down to 1588), who had yielded a partial submission to the established order, and whom he therefore accounted a renegade. He also wrote several vigorous treatises in defence of separatism and congregational independency, the most important being:-A True Description of the Visible Congregation of the Saints, &c. (1589); A Plain Refutation of Mr Gifford's Booke, intituled A Short Treatise Gainst the Donatistes of England (1590-1591), and A Brief Discovery of the False Church (1591). Others were written in conjunction with his fellowprisoner, Greenwood. These writings were taken charge of by friends and mostly printed in Holland. By 1590 the bishops thought it advisable to try other means of convincing or silencing these indomitable controversialists, and sent several conforming Puritan ministers to confer with them, but without effect. At length it was resolved to proceed on a capital charge of "devising and circulating seditious books," for which, as the law then stood, it was easy to secure a conviction. They were tried and sentenced to death on the 23rd of March 1593. What followed is, happily, unique in the history of English misrule. The day after sentence they were brought out as if for execution and respited. On the 31st of March they were taken to the gallows, and after the ropes had been placed about their necks were again respited. Finally they were hanged early on the morning of the 6th of April. The motive of all this is obscure, but there is some evidence that the lord treasurer Burghley endeavoured to save their lives, and was frustrated by Whitgift and other bishops.

The opinions of Browne and Barrowe had much in common, but were not identical. Both maintained the right and duty of the Church to carry out necessary reforms without awaiting the permission of the civil power; and both advocated congregational independency. But the ideal of Browne was a spiritual democracy, towards which separation was only a means. Barrowe, on the other hand, regarded the whole established church order as polluted by the relics of Roman Catholicism, and insisted on separation as essential to pure worship and discipline (see further Congregationalism). Barrowe has been credited by H. M. Dexter and others with being the author of the "Marprelate Tracts"; but this is improbable.

Authorities.—H. M. Dexter, *The Congregationalism of the Last Three Hundred Years*; F. J. Powicke, *Henry Barrowe and the Exiled Church*. See also B. Brook, *Lives of the Puritans*; and Cooper, *Athenae Cantabrigienses* (1861), vol. ii.

BARROW-IN-FURNESS, a seaport and municipal, county and parliamentary borough of Lancashire, England, 2641/2 m. N.W. by N. from London, on the Furness railway. Pop. (1891) 51,712; (1901) 57,586. It lies on the seaward side of the hammer-shaped peninsula forming part of the district of Furness, between the estuary of the Duddon and Morecambe Bay, where a narrow channel intervenes between the mainland and the long low island of Walney, on which the erection of a strong fort was undertaken by the War Office in 1904. In 1905 the connexion of Walney with the mainland by a bridge was undertaken. In the channel is Barrow Island (among others) which is connected with the mainland, reclamation having been carried on until only a narrow channel was left, which was utilized as docks. Barrow is of modern and remarkably rapid growth. Its rise was dependent primarily on the existence and working of the veins of pure haematite iron ore in the district of Furness (q, v). At the outset Barrow merely exported the ore to the furnaces of South Wales and the midlands. At the beginning of the 19th century this export amounted at most to a few thousand tons, and though by the middle of the century it had reached some 50,000 in 1847 the population of Barrow was only 325. In 1846 the first section of the Furness railway was opened, connecting Barrow with the mines near Dalton; in the ensuing years a great increase in trade justified the opening of further communications, and in 1859 the iron works of Messrs Schneider & Hannay were instituted. The Barrow Haematite Steel Company (1866) absorbed this company, and a great output of steel produced by the Bessemer process was begun. Other industries followed. Of these the shipbuilding works have surpassed the steel works in importance, the celebrated firm of Vickers, Sons & Maxim having a yard where they construct numerous vessels of war as well as others. There are also a petroleum storage establishment, a paper-pulp factory, jute works, and engineering and wagon works.

The docks in the strait between Barrow Island and the mainland were constructed in 1867, and named the Devonshire and Buccleuch docks. The Ramsden docks are a subsequent extension. These are 24 ft. in depth. There are also a graving dock 500 ft. long, a depositing dock accommodating vessels of 16 ft. draught, and two electric cranes each able to lift 150 tons. The Furness railway company is the dock authority. Passenger steamers run on weekdays to Belfast.

The town is laid out in rectangular form, and contains several handsome churches, municipal buildings, exchange and other public buildings. An electric tramway service connects the outskirts and the centre. There are statues of Lord Frederick Cavendish (assassinated at Dublin, 1882), in front of the town-hall, and of Sir James Ramsden (d. 1896), managing director of the Furness railway and first mayor of Barrow, to whom, together with the dukes of Devonshire and Buccleuch, the town owed much of its rise in the middle of the 19th century. The cottage inhabited by George Romney the painter from 1742 to 1755 has been preserved from demolition and retained as a memorial. Educational institutions include a school of science and art, a girls' high school and a technical school. Barrow is a suffragan bishopric in the diocese of Carlisle. The parliamentary borough (1885), falling within the North Lonsdale division of the county, returns one member. The town was incorporated in 1867, and became a county borough in 1888. The corporation consists of a mayor, 8 aldermen and 24 councillors. Area, 11,023 acres.

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BARRY, SIR CHARLES (1795-1860), English architect, was born in London on the 23rd of May 1795, the son of a stationer. He was articled to a firm of architects, with whom he remained till 1817, when he set out on a three years' tour in Greece and Italy, Egypt and Palestine for the purpose of studying architecture. On his return to England in 1820 he settled in London. One of the first works by which his abilities as an architect became generally known was the church of St Peter at Brighton, completed in 1826. He built many other churches; but the marked preference for Italian architecture, which he acquired during his travels, showed itself in various important undertakings of his earlier years. In 1831 he completed the Travellers' Club in Pall Mall, a splendid work in the Italian style and the first of its kind built in London. In the same style and on a grander scale he built in 1837 the Reform Club. He was also engaged on numerous private mansions in London, the finest being Bridgewater House (1847). Birmingham possesses one of his best works in King Edward's grammar school, built in the Tudor style between 1833 and 1836. For Manchester be designed the Royal Institution of Fine Arts (1824) and the Athenaeum (1836); and for Halifax the town-hall. He was engaged for some years in reconstructing the Treasury buildings, Whitehall. But his masterpiece, notwithstanding all unfavourable criticism, is the Houses of Parliament at Westminster (1840-1860). Barry was elected A.R.A. in 1840 and R.A. in the following year. His genius and achievements were recognized by the representative artistic bodies of the principal European nations; and his name was enrolled as a member of the academies of art at Rome, Berlin, St Petersburg, Brussels and Stockholm. He was chosen F.R.S. in 1849 and was knighted by Queen Victoria in 1852. He died suddenly at Clapham near London on the 12th of May 1860, and his remains were interred in Westminster Abbey. As a landscape gardener he was no less brilliant than as an architect, and in connexion with the building of the Houses of Parliament he formed schools of modelling, stone and wood carving, cabinet-making, metal-working, glass and decorative painting, and of encaustic tile-making. In 1867 appeared a life of him by his son Bishop Alfred Barry. A claim was thereupon set up on behalf of Pugin, the famous architect, who was dead and who had been Barry's assistant, to a much larger share in the work of designing the Houses of Parliament than was admitted in Dr Barry's narrative. The controversy raged for a time, but without substantiating Pugin's claim.

His second son, Alfred Barry (1826-), was educated at King's College, London, and Trinity College, Cambridge, where he was 4th wrangler and gained a first-class in the classical tripos in 1848. He was successively sub-warden of Trinity College, Glenalmond (1849-1854), head-master of Leeds grammar school (1854-1862), principal of Cheltenham College (1862-1868), and principal of King's College, London (1868-1883). He was canon of Worcester from 1871 to 1881, and of Westminster from 1881 to 1884. From 1884 to 1889 he served as bishop of Sydney and primate of Australia, and on his return to England he was assistant bishop in the diocese of Rochester from 1889 to 1891, and rector of St James's, Piccadilly, from 1895 to 1900. He was appointed canon of Windsor in 1891 and assistant bishop in West London in 1897. Besides the life of his father mentioned above, he published numerous theological works.

Another son, Edward Middleton Barry (1830-1880), was also an architect. He acted as assistant to his father during the latter years of Sir Charles's life. On the death of his father, the duty of completing the latter's unfinished work devolved upon him. Amongst other buildings thus completed were the Houses of Parliament at Westminster (see Architecture, fig. 91, and Plate X. fig. 118), and Halifax town-hall (Id. fig. 90). In 1861 he was elected an associate of the Royal Academy; and in 1869 a full academician. From 1873 till his death he held the Academy's professorship of architecture. Among other buildings designed by him were Covent Garden theatre, Charing Cross and Cannon Street hotels, the Birmingham and Midland Institute, new galleries for the National Gallery and new chambers for the Inner Temple. He died on the 27th of January, 1880.

The youngest son, Sir John Wolfe Wolfe-Barry (1836-), the eminent engineer, who assumed the additional name of Wolfe in 1898, was educated at Glenalmond, and was articled as engineering pupil to Sir John Hawkshaw, with whom he was associated in the building of the railway bridges across the Thames at Charing Cross and Cannon Street. In 1867 he began to practise on his own account, and soon gained an extensive connexion with railway companies, both in Great Britain and in other countries. Among the works on which he was engaged were extensions of the Metropolitan District railway, the St Paul's station and bridge of the London, Chatham & Dover railway, the Barry Docks of the Barry railway company near Cardiff, and the Tower and new Kew bridges over the Thames. On the completion of the Tower Bridge in 1894, he was made a C.B., becoming K.C.B. three years later. He served on several royal commissions, including those on Irish Public Works (1886-1890), Highlands and Islands of Scotland (1889-1890), Accidents to Railway Servants (1899-1900), Port of London (1900-1902), and London Traffic (1903-1905). He was elected president of the Institution of Civil Engineers in 1896, and published books on Railway Appliances (1874), and, with Sir F. J. Bramwell, on Railways and Locomotives (1882).

BARRY, ELIZABETH (1658-1713), English actress, of whose early life the details are meagre. At first she was so unsuccessful on the stage as to be more than once dismissed; but she was coached by her lover the earl of Rochester, who had laid a wager that in a short time he would make a first-rate actress of her, and the results confirmed his judgment. Mrs Barry's performance as Isabella, queen of Hungary, in the earl of Orrery's Mustapha, was said to have caused Charles II. and the duke and duchess of York so much delight that the duchess took lessons in English from her, and when she became queen she gave Mrs Barry her coronation robes in which to appear as Elizabeth in Banks's Earl of Essex. Mrs Barry is said to have created over 100 parts, and she was particularly successful in the plays of Thomas Otway. Betterton says that her acting gave "success to plays that would disgust the most patient reader." Dryden pronounced her "always excellent." Cibber is authority for the statement that it was on her behalf that benefits, which up to that time were reserved for authors, were first established for actors by command of James II. Mrs Barry had a child by Lord Rochester and a second by Sir George Etheredge, both of whom were provided for by their fathers. In 1709 she retired from the stage and died on the 7th of November 1713.

BARRY, JAMES (1741-1806), English painter, was born at Cork on the 11th of October 1741. His father had been a builder, and, at one time of his life, a coasting trader between the two countries of England and Ireland. To this business of trader James was destined, and he actually made when a boy several voyages; but he manifested such an aversion to the life and habits of a sailor as to induce his father to suffer him to pursue his own inclinations, which led strongly towards drawing and study. At the schools in Cork to which he was sent he was regarded as a prodigy. About the age of seventeen he first attempted oil-painting, and between that and the age of twenty-two, when he first went to Dublin, he produced several large pictures, which decorated his father's house, such as "Aeneas escaping with his Family from the Flames of Troy," "Susanna and the Elders," "Daniel in the Lions' Den," &c. At this period he also produced the painting which first brought him into public notice, and gained him the acquaintance and patronage of Edmund Burke. The picture was founded on an old tradition of the landing of St Patrick on the sea-coast of Cashel, and of the conversion and baptism of the king of that district by the patron saint of Ireland. It was exhibited in London in 1762 or 1763.

By the liberality of Burke and his other friends, Barry in the latter part of 1765 was enabled to go abroad. He went first to Paris, then to Rome, where he remained upwards of three years, from Rome to Florence and Bologna, and thence home through Venice. His letters to the Burkes, giving an account of Raphael, Michelangelo, Titian and Leonardo da Vinci, show remarkable insight. Barry painted two pictures while abroad, an Adam and Eve, and a Philoctetes, neither of them of any merit. Soon after his return to England in 1771 he produced his picture of Venus, which was compared, though with little justice, to the Galatea of Raphael, the Venus of Titian and [v.03 p.0445] the Venus de Medici. In 1773 he exhibited his "Jupiter and Juno on Mount Ida." His "Death of

General Wolfe," in which the British and French soldiers are represented in very primitive costumes, was considered as a falling-off from his great style of art. His fondness for Greek costume was assigned by his admirers as the cause of his reluctance to paint portraits. His failure to go on with a portrait of Burke which he had begun caused a misunderstanding with his early patron. The difference between them is said to have been widened by Burke's growing intimacy with Sir Joshua Reynolds, and by Barry's feeling some little jealousy of the fame and fortune of his rival "in a humbler walk of the art." About the same time he painted a pair of classical subjects, Mercury inventing the lyre, and Narcissus looking at himself in the water, the last suggested to him by Burke. He also painted a historical picture of Chiron and Achilles, and another of the story of Stratonice, for which last the duke of Richmond gave him a hundred guineas. In 1773 it was proposed to decorate the interior of St Paul's with historical and sacred subjects; but the plan fell to the ground, from not meeting with the concurrence of the bishop of London and the archbishop of Canterbury. Barry was much mortified at the failure, for he had in anticipation fixed upon the subject he intended to paint—the rejection of Christ by the Jews when Pilate proposes his release. In 1773 he published An Inquiry into the real and imaginary Obstructions to the Acquisition of the Arts in England, vindicating the capacity of the English for the fine arts and tracing their slow progress hitherto to the Reformation, to political and civil dissensions, and lastly to the general direction of the public mind to mechanics, manufactures and commerce. In 1774 a proposal was made through Valentine Green to Reynolds, West, Cipriani, Barry, and other artists to ornament the great room of the Society for the Encouragement of Arts, Manufactures and Commerce in the Adelphi with historical and allegorical paintings. This proposal was at the time rejected by the artists themselves; but in 1777 Barry made an offer to paint the whole on condition of being allowed the choice of his subjects, and being paid by the society the expenses of canvas, paints and models. His offer was accepted, and he finished the series of pictures at the end of seven years to the entire satisfaction of the members of the society, who granted him two exhibitions, and at different periods voted him 50 guineas, their gold medal and 200 guineas. Of the six paintings making up the series, only one, that of the Olympic Games, shows any artistic power.

Soon after his return from the continent Barry had been chosen a member of the Royal Academy; and in 1782 he was appointed professor of painting in the room of Mr Penny with a salary of £30 a year. Among other things, he insisted on the necessity of purchasing a collection of pictures by the best masters as models for the students, and proposed several of those in the Orleans collection. This recommendation was not relished, and in 1799 Barry was expelled from the academy, soon after the appearance of his *Letter to the Dilettanti Society*, a very amusing but eccentric publication, full of enthusiasm for his art and at the same time of contempt for the living professors of it. After the loss of his salary, a subscription was set on foot by the earl of Buchan to relieve him from his difficulties, and to settle him in a larger house to finish his picture of Pandora. The subscription amounted to £1000, with which an annuity was bought, but on the 6th of February 1806 he was seized with illness and died on the 22nd of the same month. On the 14th of March his remains were interred in St Paul's.

As an artist, Barry was more distinguished for the strength of his conceptions, and for his resolute and persistent determination to apply himself only to great subjects, than for his skill in designing or for beauty in his colouring. His drawing is rarely good, his colouring frequently wretched. He was extremely impulsive and unequal; sometimes morose, sometimes sociable and urbane; jealous of his contemporaries, and yet capable of pronouncing a splendid eulogy on Reynolds.

BARRY, SIR REDMOND (1813-1880), British colonial judge, son of Major-General H. G. Barry, of Ballyclough, Co. Cork, was educated at a military school in Kent, and at Trinity College, Dublin, and was called to the Irish bar in 1838. He emigrated to Australia, and after a short stay at Sydney went to Melbourne, with which city he was ever afterwards closely identified. After practising his profession for some years, he became commissioner of the court of requests, and after the creation in 1851 of the colony of Victoria, out of the Port Phillip district of New South Wales, was the first solicitor-general with a seat in the legislative and executive councils. Subsequently he held the offices of judge of the Supreme Court, acting chief-justice and administrator of the government. He represented Victoria at the London International Exhibition of 1862 and at the Philadelphia Exhibition of 1876. He was knighted in 1860 and was created K.C.M.G. in 1877. Sir Redmond Barry was the first person in Victoria to take an interest in higher education, and induced the local government to expend large sums of money upon that object. He was the founder of the university of Melbourne (1853), of which he was the first chancellor, was president of the Melbourne public library (1854), national gallery and museum, and was one of the first to foster the volunteer movement in Australia. To his exertions is due the prosperity of the two institutions with which his memory is identified.

BARRY, SPRANGER (1719-1777), British actor, was born in Dublin on the 23rd of November 1719, the son of a silversmith, to whose business he was brought up. His first appearance on the stage was at the Smock Alley theatre on the 5th of February 1744, and his engagement at once increased its prosperity. His first London appearance was made in 1746 as Othello at Drury Lane. Here his talents were speedily recognized, and in *Hamlet* and *Macbeth* he alternated with Garrick, arousing the latter's jealousy by his success as Romeo. This resulted in his leaving Drury Lane for Covent Garden in 1750, accompanied by Mrs Cibber, his Juliet. Both houses now at once put on *Romeo and Juliet* for a series of rival performances, and Barry's impersonation was preferred by the critics to Garrick's. In 1758 Barry built the Crow Street theatre, Dublin, and later a new theatre in Cork, but he was not successful as a manager and returned to London to

play at the Haymarket, then under the management of Foote. As his second wife, he married in 1768 the actress Mrs Dancer (1734-1801), and he and Mrs Barry played under Garrick's management, Barry appearing in 1767, after ten years' absence from the stage, in Othello, his greatest part. In 1774 they both moved to Covent Garden, where Barry remained until his death on the 10th of January 1777. He was a singularly handsome man, with the advantage of height which Garrick lacked.

His second wife, Ann Street Barry, was born in Bath in 1734, the daughter of an apothecary. Early in life she married an actor of the name of Dancer, and it was as Mrs Dancer that she made her first recorded appearance in 1758 as Cordelia to Spranger Barry's Lear at the Crow Street theatre. During the next nine years she played all the leading tragic parts, but without any great success, and it was not until she came to Drury Lane with Barry that her reputation advanced to the high point at which it afterwards stood. After his death, she remained at Covent Garden and married a man much younger than herself, named Crawford, being first billed as Mrs Crawford in 1778. Her last appearance is said to have been as Lady Randolph in *Douglas* at Covent Garden in 1798. This part, and that of Desdemona, were among her great impersonations; in both she was considered by some critics superior to Mrs Siddons, who expressed her fear of her in one of her letters. She died on the 29th of November 1801 and was buried in Westminster Abbey.

BARRY, an urban district and seaport of Glamorganshire, Wales, on the Bristol Channel, 153 m.

by rail from London and 8 m. S.W. from Cardiff. Its station is a terminus on the Barry railway, which starts at Hafod in the Rhondda Valley, where it joins the Taff Vale railway, having also junctions with the same line for Aberdare and Merthyr at Treforest, and for Cardiff and Penarth at Cogan, and with the Great Western main line at Peterstone and St Fagans. A branch from the main line at Tyn-y-caeau connects with the Rhymney railway, the London & North-Western railway, and the Brecon & Merthyr railway. The Vale of Glamorgan railway (which is worked by the Barry company and has a junction with the Great Western railway at Bridgend) affords a direct route to Barry from the Llynvi, Ogmore and Garw coalfields. The urban district of Barry, with a population in 1901 of 27,030, comprises the ecclesiastical parishes of Barry, Cadoxton, Merthyr-Dovan, and a portion of Sully in which is included Barry Island (194 acres), now, however, joined to the mainland. The total population of this area in 1881 was only about 500, that of Barry village alone being only 85. A small brook named Barri runs here into the sea, whence the place was formerly known in Welsh as Aber-Barri, but the name of both the river and the island is supposed to be derived from Baruch, a Welsh saint of the 7th century, who had a cell on the island. His chapel (which still existed in Leland's time) was a place of pilgrimage in the middle ages. According to Giraldus, his own family derived its name de Barri from the island which they once owned. One of the followers of Fitzhamon settled at Barry about the end of the 11th century, building there a castle of which only a gateway remains. Besides the small old parish churches of Merthyr-Dovan and Cadoxton, and the rebuilt parish church of Barry, there are four modern churches (in one of which Welsh services are held). There are about thirty nonconformist chapels, in nearly a third of which the services are Welsh. There are also a Roman Catholic church, and one for German and Scandinavian seamen. The other public buildings are a county intermediate school for 250 boys and girls, built in 1896, a free library (opened in 1892) with four branch reading-rooms, a seamen's institute, the Barry market, built in 1890 at a cost of

Barry owes its seaport to the determination of a number of colliery owners to secure an alternative port to Cardiff, with an independent railway to it from the coalfields. After failing in 1883, they obtained parliamentary powers for this purpose in 1884, and the first sod of the new dock at Barry was cut in November of that year. The docks are 114 acres in extent, and have accommodation for the largest vessels afloat. Dock No. 1, opened on the 18th of July 1889, is 73 acres (with a basin of 7 acres) and occupies the eastern side of the old channel between the island and the mainland, having a well-sheltered deep-sea entrance. There is good anchorage between Barry and Sully islands. Dock No. 2 (34 acres) was opened on the 10th of October 1898. There are 41 acres of timber-ponds and three large graving-docks. For loading the coal there are thirty fixed and seven movable coal-hoists. The total tonnage of the exports in 1906 was 9,757,380 (all of which, except 26,491 tons, was coal), and of the imports 506,103 tons.

£3500 (but now used as a concert-hall), and Romilly hall for public meetings.

BAR-SALĪBĪ, JACOB or DIONYSIUS, [1] the best-known and most voluminous writer in the Syrian Jacobite church of the 12th century, was, like Bar-Hebraeus, a native of Malatia on the Upper Euphrates. In 1154 he was created bishop of Mar'ash by the patriarch Athanasius VIII.; a year later the diocese of Mabbog was added to his charge. In 1166 Michael I., the successor of Athanasius, transferred him to the metropolitan see of Āmid in Mesopotamia, and there he remained till his death in 1171. A long account of his writings, with copious extracts from some of them, has been given by Assemani (Bibl. Orient. ii. pp. 156-211); and W. Wright (Syriac Literature, pp. 246-250) has added further particulars as to the MSS. in which they are contained. Probably the most important are his exhaustive commentaries on the text of the Old and New Testaments, in which he has skilfully interwoven and summarized the interpretations of previous writers such as Ephrem, Chrysostom, Cyril, Moses Bar-Kephā and John of Dārā, whom he mentions together in the preface to his commentary on St Matthew. Among his other main works are a treatise against heretics, containing inter alia a polemic against the Jews and the Mahommedans; liturgical treatises, epistles and homilies. His commentaries on the Gospels were to some extent used by Dudley Loftus in the 17th century. But the systematic editing of his works was only begun in 1903 with H. Labourt's edition and translation of his Exposition of the Liturgy (Paris). His commentaries on the Gospels have been edited and translated by J. Sedlaček and J. B. Chabot (Fasc. I., Paris, 1906), and the Syriac text of the treatise against the Jews has been edited

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by J. de Zwaan (Leiden, 1906). Bar-Ṣalībī was undoubtedly an able theologian; his vigour combined with terseness in argument is well seen, for instance, in the introductory sections of his commentary on St Matthew. Of his originality it is hard to judge, as he does not usually indicate in detail the sources of his arguments and interpretations. He does not, however, claim for himself to be more than a compiler, at least in his commentaries. His Syriac style is good, considering the lateness of the period at which he wrote.

(N. M.)

[1] Jacob was his baptismal name; Dionysius he assumed when consecrated to the bishopric.

BARSI, a town of British India, in the Sholapur district of Bombay, lying within a tract entirely surrounded by the Nizam's dominions. Pop. (1901) 24,242. Barsi is a flourishing centre of trade, exporting to Bombay large quantities of cotton and oil-seeds. It has several factories for ginning and pressing cotton—some on a large scale. It is connected with the main line of the Great Indian Peninsula railway by a light railway.

BAR-SUR-AUBE, a town of north-eastern France, capital of an arrondissement in the department of Aube, 34 m. E. by S. of Troyes on the main line of the Eastern railway between that town and Belfort. Pop. (1906) 4276. Bar-sur-Aube lies at the foot of hills on the right bank of the Aube at its confluence with the Bresse. A circle of boulevards occupies the site of the old ramparts, fragments of which still remain. Of the ecclesiastical buildings, the most noteworthy are St Pierre and St Maclou, both dating mainly from the end of the 12th century. St Pierre has wooden exterior galleries and two fine Gothic porches. The sacristy of St Maclou is conjectured to have formed the chapel of the castle of the counts of Bar, of which the square tower flanking the north side of the church formed the entrance. The town is the seat of a sub-prefect, and the public institutions include a tribunal of first instance and a communal college. Flour-milling, tanning, and the manufacture of brandy, hosiery and agricultural implements are carried on. The wine of the district is much esteemed.

Traces of a Roman settlement have been found on hills to the south of the town. Under the domination of the counts of Champagne, it became the scene of important fairs which did not cease till 1648. In 1814 several actions between the French and the army of the allies took place at Bar-sur-Aube (see Napoleonic Wars).

BAR-SUR-SEINE, a town of eastern France, capital of an arrondissement in the department of Aube, on the left bank of the Seine, 20 m. S.E. of Troyes by the Eastern railway. Pop. (1906) 2812. The town lies at the foot of a wooded hill on which stand the ruins of the castle of the counts of Bar, and is composed chiefly of one long street, bordered in places by houses of the 16th century. Its principal building is the church of St Etienne, of the 16th and 17th centuries, which contains some fine stained glass. Bar-sur-Seine has a sub-prefecture and a tribunal of first instance. Tanning, dyeing, flour-milling, brandy-distilling and the manufacture of glass are among the industries. The Canal de la Haute-Seine begins at this point. The town was devastated in 1359 by the English, when, according to Froissart, no fewer than 900 mansions were burnt. Afterwards it suffered greatly in the religious wars of the 16th century.

BART, JEAN (1651-1702), French naval commander, son of a fisherman, was born in Dunkirk on the 21st of October 1651. He served when young in the Dutch navy, but when war broke out between Louis XIV. and Holland in 1672 he entered the French service. He gained great distinction in the Mediterranean, where he held an irregular sort of commission, not being then able from his low birth to receive a command in the navy. His success was so great, however, that he was made a lieutenant in 1679. He rose rapidly to the rank of captain and then to that of admiral. The peace of Ryswick put a close to his active service. Many anecdotes are narrated of the courage and bluntness of the uncultivated sailor, who became the popular hero of the French naval service. The town of Dunkirk has honoured his memory by a statue and by naming a public square after him.

See Richer, Vie de Jean Bart (1780), and many editions since; Vanderest, Histoire de Jean Bart.

BARTAN, more correctly Bartin, a town in the vilayet of Kastamuni, Asiatic Turkey, retaining the name of the ancient village Parthenia and situated near the mouth of the Bartan-su (anc. *Parthenius*), which formed part of the boundary between Bithynia and Paphlagonia. Various aetiological explanations of the name Parthenius were given by the ancients, *e.g.* that the maiden Artemis hunted on its banks, or that the flow of its waters was gentle and maiden-like. The town, which is the residence of a *kaïmakam*, is built on two low limestone hills and its streets are paved with limestone blocks. It is noted for the fine boxwood grown in the vicinity, is a port of call for Black Sea coasting steamers and carries on a considerable trade with Constantinople which might be increased were it not for the obstruction of the harbour by a bar. Pop. 8677, according to Cuinet, *La Turquie d'Asie* (1894).

BARTELS, HANS VON (1856-), German painter, was born in Hamburg, the son of Dr N. F. F. von Bartels, a Russian government official. He studied first under the marine painter R. Hardorff in Hamburg, then under C. Schweitzer in Düsseldorf and C. Oesterley in Hamburg, and finally at the Berlin School of Art. After travelling extensively, especially in Italy, he settled in Munich in 1885 and was appointed professor of painting in 1891. An oil painter of great power, he is one of the leading German water-colour painters, mainly of marines and scenes of fishing life, painted with rude vigour and a great display of technical skill. He excels in storm scenes and in depicting

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the strong, healthy fishing-folk of the northern coasts. He became an honorary member of leading English, German, Dutch, Belgian and Austrian art societies. Among his principal works are:—"Sturmflut" (Berlin Gallery); "Lonely Beach" (Hungarian National Gallery); "Potato Harvest—Rügen" (Prague); "Storm—Bornholm" (German emperor's collection); and "Moonlight on the Zuyder Zee" (New Pinakothek, Munich).

BARTENSTEIN, a town of Germany, in the kingdom of Prussia, on the Alle, 34 m. S. of Königsberg by rail. Pop. (1900) 6805. It has a considerable trade in corn and live stock, and its industries comprise founding and carriage-building, tanneries, breweries and potteries. Bartenstein is celebrated for the treaty concluded here on the 26th of April 1807, between Prussia and Russia.

BARTER (from Fr. *barater*, to truck, to exchange), the exchange of commodities for commodities, in contra-distinction to the exchange of commodities for money. Barter was the simplest form of trading among primitive communities, but its inconveniences led, at an early stage of civilization, to the adoption of metals as mediums of exchange. Barter, however, is still very common in dealings with uncivilized peoples, and traders in many countries find that the most satisfactory method of effecting exchange is to furnish themselves with such commodities as weapons, tools and ornaments, which are more readily taken than money.

For the history of barter and the steps by which a system of currency was gradually evolved, see Money. Consult also W. S. Jevons, *Money and the Mechanism of Exchange*; A. Marshall, *Economics*; W. Ridgeway, *Origin of Currency and Weight Standards*.

BARTET (REGNAULT), **JEANNE JULIA** (1854-), French actress, was born in Paris and trained at the Conservatoire. In 1872 she began a successful career at the Vaudeville, and in 1879 was engaged at the Comédie Francaise, of which she became a *sociétaire* in 1880. For many years she played the chief parts both in tragedy and comedy, her grand style and exquisite finesse making her supreme among the younger actresses on the French stage. She had a season in London in 1908, when her consummate art was displayed in a number of parts.

BARTH, HEINRICH (1821-1865), German explorer, was born at Hamburg on the 16th of February 1821, and educated at Berlin University, where he graduated in 1844. He had already visited Italy and Sicily and had formed a plan to journey through the Mediterranean countries. After studying Arabic in London he set out on his travels in 1845. From Tangier he made his way overland throughout the length of North Africa, visiting the sites of the ancient cities of Barbary and Cyrenaica. He also travelled through Egypt, ascending the Nile to Wadi Halfa and crossing the desert to Berenice. While in Egypt he was attacked and wounded by robbers. Crossing the Sinai peninsula he traversed Palestine, Syria, Asia Minor, Turkey and Greece, everywhere examining the remains of antiquity; and returned to Berlin in 1847. For a time he was engaged there as *Privat-docent*, and in preparing for publication the narrative of his *Wanderungen durch die Küstenländer des Mittelmeeres*, which appeared in 1849.

At the instance of Bunsen and other scientists, Barth and Adolf Overweg, a Prussian astronomer, were appointed colleagues of James Richardson, an explorer of the Sahara who had been selected by the British government to open up commercial relations with the states of the central and western Sudan. The party left Tripoli early in 1850, but the deaths of Richardson (March 1851) and Overweg (September 1852) left Barth to early on the mission alone. He returned to Europe in September 1855, after one of the most fruitful expeditions ever undertaken in inner Africa. In addition to journeys across the Sahara, Barth traversed the country from Lake Chad and Bagirmi on the east to Timbuktu on the west and Cameroon on the south, making prolonged sojourns in the ancient sultanates or emirates of Bornu, Kano, Nupe, Sokoto and Gando and at Timbuktu. He studied minutely the topography, history, civilizations and resources of the countries he visited. The story of his travels was published simultaneously in English and German, under the title Travels and Discoveries in North and Central Africa (1857-1858, 5 vols.). For accuracy, interest, variety and extent of information Barth's Travels have few rivals among works of the kind. It is a book that will always rank as a standard authority on the regions in question, of which a great part, under the name of Nigeria, has since come under British rule. Except a C.B., Barth himself received no recognition of his services from the British government. He returned to Germany, where he prepared a collection of Central African vocabularies (Gotha, 1862-1866). In 1858 he undertook another journey in Asia Minor, and in 1862 visited Turkey in Europe. In the following year he was appointed professor of geography at Berlin University and president of the Geographical Society. He died at Berlin on the 25th of November 1865.

See Schubert's *Heinrich Barth, der Bahnbrecher der deutschen Afrikaforschung* (Berlin, 1897). An edition of the *Travels* in two volumes was published in London in 1890 (Minerva Library of Famous Books).

BARTH, KASPAR VON (1587-1658), German philologist, was born at Küstrin in the province of Brandenburg on the 21st of June 1587. He was an extremely precocious child, and was looked upon as a marvel of learning. After studying at Gotha, Eisenach, Wittenberg and Jena, he travelled extensively, visiting most of the countries of Europe. Too independent to accept any regular post, he lived alternately at Halle and on his property at Sellerhausen near Leipzig. In 1636, his library and MSS. at Sellerhausen having been destroyed by fire, he removed to the Paulinum at Leipzig, where he died on the 17th of September 1658. Barth was a very voluminous writer; his works, which were the fruits of extensive reading and a retentive memory, are unmethodical and uncritical and marred by want of taste and of clearness. He appears to have

been excessively vain and of an unamiable disposition. Of his writings the most important are; Adversaria (1624), a storehouse of miscellaneous learning, dealing not only with classical but also with medieval and modern writers; and commentaries on Claudian (1612, 1650) and Statius (1664).

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BARTH, a town of Germany, in the kingdom of Prussia, on the Barther Bodden, a lake connecting with the Baltic, 15 m. N.W. from Stralsund by rail. Pop. (1900) 7070. It contains a fine Gothic Protestant church (St Mary's) dating from the 13th century and has several educational establishments, notably a school of seamanship. Its industries comprise iron-founding, ship-building, brewing, and the manufacture of cigars, leather and tinned fish. There is an active export trade in grain.

BARTHÉLEMY, ANATOLE JEAN-BAPTISTE ANTOINE DE (1821-1904), French archaeologist and numismatist, was born at Reims on the 1st of July 1821, and died at Ville d'Avray on the 27th of June 1904. In collaboration with J. Geslin de Bourgogne he published Études sur la révolution en Bretagne in 1858, and between 1855 and 1879 an exhaustive work in six volumes on the Anciens évêchés de Bretagne; histoire et monuments. In 1880 appeared the Choix de documents inédits sur l'histoire de la ligue en Bretagne, by himself alone. But it was, above all, his numismatical work which established his reputation. This included several popular publications, such as the Nouveau manuel complet de numismatique ancienne (1851; second edition, revised, 1890), and the Nouveau manuel complet de numismatique du moyen âge et moderne (1853; new edition revised by Adrien Planchet), and a large number of monographs and articles in the technical reviews. The following may be specially mentioned: Numismatique mérovingienne (1865); Essai sur la monnaie parisis (1874); Note sur l'origine de la monnaie tournoise (1896); and in the series of instructions issued by the Comité des travaux historiques et scientifiques he edited the number on La Numismatique de la France (1891). In 1897 he was elected a member of the Académie des Inscriptions et Belles-lettres.

His younger brother, Édouard Marie, comte de Barthélemy, who was born in Angers in 1830, has published a number of documents upon the ancient French nobility and upon the history of Champagne.

BARTHÉLEMY, AUGUSTE MARSEILLE (1796-1867), French satirical poet, was born at Marseilles in 1796. His name can hardly be separated from that of his friend and compatriot, J. P. A. Méry (1798-1866), with whom he carried on so intimate a collaboration that it is not possible to distinguish their personalities in their joint works. After having established some local reputation as a poet, Barthélemy went to Paris, where by one of his first efforts, Le Sacre de Charles X (1825) he gained the favour of the court. His energies, however, were soon enlisted in the service of the opposition party. In 1825 appeared a clever political satire, Les Sidiennes, followed by La Villéliade ou la prise du château de Rivoli (1827), La Corbiéréide (1827), La Peyronnéide (1827), the joint productions of Barthélemy and Méry. The success was immediate and pronounced; fifteen editions of the Villéliade were called for during the year. A rapid succession of political squibs and satires was now poured forth by the authors, among the most remarkable being Biographie des quarante de l'académie française (1826) and Napoléon en Égypte (1828), which passed through nearly a dozen editions in a year. In 1829 Barthélemy was imprisoned and fined 1000 francs for the publication of their Fils de l'homme, a poem on the duke of Reichstadt, Napoleon's son. The Revolution of 1830 liberated him; and in company with Méry, he celebrated the triumph of the people in one of their most brilliant efforts, L'Insurrection. From March 1831 to April 1832 they produced a series of verse satires issued weekly, the Némésis, attacking the government and ministers of Louis Philippe. The small pension of which Barthélemy was the recipient was stopped. When the publication ceased there was a strong suspicion that Barthélemy had been paid for his silence. In 1832 he published an anonymous poem, supporting some acts of the government which were peculiarly obnoxious to the Liberal party. This change of front destroyed his influence and his later writings passed unnoticed. For the next few years he enjoyed a handsome pension from the government and refrained from all satirical writing. He again resumed his old style in 1844 but without the former success. From that date he contented himself with merely occasional poems. Barthélemy died on the 23rd of August 1867 at Marseilles. Joseph Méry was an ardent romanticist and wrote a great number of stories now forgotten. He produced several pieces at the Paris theatres, and also collaborated with Gérard de Nerval in adaptations from Shakespeare and in other plays. He received a pension from Napoleon III. and died in Paris on the 16th of June 1866.

The *Œuvres* of Barthélemy and Méry were collected, with a notice by L. Reybaud, in 1831 (4 vols.). See also *Barthélemy et Méry étudiés spécialement dans leurs rapports avec la légende napoléonienne*, by Jules Garsou in vol. lviii. of the Mémoires of the Académie Royale ... de Belgique, which contains full information on both authors.

BARTHÉLEMY, FRANÇOIS, Marquis de (1747 or 1750-1830), French politician, was educated by his uncle the abbé Jean Jacques Barthélemy for a diplomatic career, and after serving as secretary of legation in Sweden, in Switzerland and in England, was appointed minister plenipotentiary in Switzerland, in which capacity he negotiated the treaties of Basel with Prussia and Spain (1795). Elected a member of the Directory in May 1797, through royalist influence, he was arrested at the *coup d'état* of the 18 Fructidor (17th of September 1797) and deported to French Guiana, but escaped and made his way to the United States and then to England. He returned to France after the 18 Brumaire, entered the senate in February 1800 and contributed to the establishment of the consulship for life and the empire. In 1814 he abandoned Napoleon, took part in the drawing up of the constitutional charter and was named peer of France. During

the Hundred Days he lived in concealment, and after the second Restoration obtained the title marquis, and in 1819 introduced a motion in the chamber of peers tending to render the electoral law more aristocratic.

His *Papiers* have been published by J. Kaulek, 4 vols. (Paris, 1886-1888). See A. Sorel, *L'Europe et la Révolution française*, iv. (Paris, 1892); L. Sciout, *Le Directoire* (Paris, 1895).

BARTHÉLEMY, JEAN JACQUES (1716-1795) French writer and numismatist, was born on the 20th of January 1716 at Cassis, in Provence. He was educated first at the college of the Oratory in Marseilles, and afterwards at that of the Jesuits in the same city. While studying for the priesthood, which he intended to join, he devoted much attention to oriental languages, and was introduced by his friend M. Gary of Marseilles to the study of classical antiquities, particularly in the department of numismatics. In 1744 he went to Paris with a letter of introduction to M. Gros de Boze, perpetual secretary of the Academy of Inscriptions and Belles-lettres and keeper of the royal collection of medals. He became assistant to de Boze, on whose death (1753) he became keeper of the medals. In 1755 he accompanied the French ambassador, M. de Stainville, afterwards duc de Choiseul, to Italy, where he spent three years in archaeological research. Choiseul had a great regard for Barthélemy, and on his return to France, Barthélemy became an inmate of his house, and received valuable preferments from his patron. In 1789, after the publication of his Voyage du jeune Anacharsis, he was elected a member of the French Academy. During the Revolution Barthélemy was arrested as an aristocrat. The Committee of Public Safety, however, were no sooner informed by the duchess of Choiseul of the arrest, than they gave orders for his immediate release, and in 1793 he was nominated librarian of the Bibliothèque Nationale. He refused this post but resumed his old functions as keeper of medals, and enriched the national collection by many valuable accessions. Barthélemy died on the 30th of April 1795.

Barthélemy was the author of a number of learned works on antiquarian subjects, but the great work on which his fame rests is Voyage du jeune Anacharsis en Grèce, vers le milieu du quatrième siècle avant l'ère chrétienne (4 vols., 1787). He had begun it in 1757 and had been working on it for thirty years. The hero, a young Scythian descended from the famous philosopher Anacharsis, is supposed to repair to Greece for instruction in his early youth, and after making the tour of her republics, colonies and islands, to return to his native country and write this book in his old age, after the Macedonian hero had overturned the Persian empire. In the manner of modern travellers, he gives an account of the customs, government and antiquities of the country he is supposed to have visited; a copious introduction supplies whatever may be wanting in respect to historical details; whilst various dissertations on the music of the Greeks, on the literature of the Athenians, and on the economy, pursuits, ruling passions, manners and customs of the surrounding states supply ample information on the subjects of which they treat. Modern scholarship has superseded most of the details in the Voyage, but the author himself did not imagine his book to be a register of accurately ascertained facts; he rather intended to afford to his countrymen, in an interesting form, some knowledge of Greek civilization. The Charicles of W. A. Becker is an attempt in a similar direction, but, though superior in scholarship, it wants the charm of style of the Anacharsis.

Barthélémy's correspondence with Paolo Paciaudi, chiefly on antiquarian subjects, was edited with the *Correspondance inédite du comte de Caylus* in 1877 by Ch. Nisard; his letters to the comte de Caylus were published by Antoine Serieys as *Voyage en Italie* (1801); and his letters to Mme du Deffand, with whom he was on intimate terms, in the *Correspondance complète de Mme du Deffand avec la duchesse de Choiseul, l'abbé Barthélemy et M. Craufurt* (3 vols., 1866), edited by the marquis de Sainte-Aulaire. See also *Mémoires sur la vie de l'abbé Barthélemy, écrits par lui-même* (1824), with a notice by Lalande. His *Œuvres complètes* (4 vols. 1821), contain a notice by Villenave.

BARTHÉLEMY SAINT-HILAIRE, JULES (1805-1895), French philosopher and statesman, was born at Paris on the 19th of August 1805. In his early years he was an active political journalist, and from 1826 to 1830 opposed the reactionary policy of the king in Le Globe. At the revolution of 1830 he signed the protestation of the journalists on the 28th of July 1830. After 1830 he contributed to different newspapers—Le Constitutionnel, Le National and the Courrier français until 1833, when he gave up politics in order to devote himself to the history of ancient philosophy, undertaking a translation of Aristotle, which occupied him the greater part of his life (1837-1892). The reputation which he gained from this work won for him the chair of ancient philosophy at the Collège de France (1838) and a seat at the Academy of Moral and Political Science (1839). After the revolution of 1848 he was elected as a republican deputy; but was obliged to withdraw after the coup d'état of Louis Napoleon. In 1855 he went as member of the international commission to Egypt to report on the possibility of the proposed Suez canal, and by the articles which he wrote he contributed largely to making the project popular in France. Elected deputy again in 1869, he joined the opposition to the Empire, and in 1871 bent all his efforts to the election of Thiers as president of the republic, acting afterwards as his secretary. Appointed senator for life in 1875, he took his place among the moderate republicans, and from September 1880 to November 1881 was minister of foreign affairs in the cabinet of Jules Ferry. The most important event of his administration was the annexation of Tunis under the form of a French protectorate, which he actively promoted. He died on the 24th of November 1895. His principal works, besides the translation of Aristotle and a number of studies connected with the same subject, are Des Védas (1854), Du Bouddhisme (1856) and Mahomet et le Coran (1865).

BARTHEZ, or Barthès, **PAUL JOSEPH** (1734-1806), French physician, was born on the 11th of December 1734 at Montpellier. He was educated at Narbonne and Toulouse, and began the study

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of medicine at Montpellier in 1750, taking his doctor's degree in 1753. In 1756 he obtained the appointment of physician to the military hospital in Normandy attached to the army of observation commanded by Marshal d'Estrées, but a severe attack of hospital fever compelled him to leave this post. In 1757 his services were required in the medical staff of the army of Westphalia, where he had the rank of consulting physician, and on his return to Paris he acted as joint editor of the *Journal des savants* and the *Encyclopédie méthodique*. In 1759 he obtained a medical professorship at Montpellier, and in 1774 he was created joint chancellor of the university. In 1778 he published his most famous work, *Nouveaux élémens de la science de l'homme*, in which he employs the expression "vital principle" as a convenient term for the cause of the phenomena of life, without committing himself to either a spiritualistic or a materialistic view of its nature. Taking the degree of doctor of civil law in 1780, he secured the appointment of counsellor to the Supreme Court of Aids at Montpellier, but he soon took up his residence in Paris, having been nominated consulting physician to the king.

On the outbreak of the French Revolution he lost much of his fortune and retired to Carcassonne, where he devoted himself to the study of theoretical medicine. It was from this retreat that he gave to the world his *Nouvelle mécanique des mouvemens de l'homme et des animaux*, which appeared in 1798. In 1802 he published his *Traitement des maladies goutteuses*, and he afterwards occupied himself in preparing for the press a new edition of his *Élémens de la science de l'homme*, of which he just lived to see the publication. His health had been declining for some years before his death, which took place soon after his removal to Paris, on the 15th of October 1806. He bequeathed his books and manuscripts to J. Lordat, who published two volumes of his *Consultations de médecine* in 1810. His *Traité du beau* was also published posthumously in 1807.

BARTHOLINUS, GASPARD [Caspar Berthelsen], (1585-1629), physician, was born in 1585 at Malmö, in Sweden. His precocity was extraordinary; at three years of age he was able to read, and in his thirteenth year he composed Greek and Latin orations and delivered them in public. When he was about eighteen he went to the university of Copenhagen and afterwards studied at Rostock and Wittenberg. He then travelled through Germany, the Netherlands, England, France and Italy, and was received with marked respect at the different universities he visited. In 1613 he was chosen professor of medicine in the university of Copenhagen, and filled that office for eleven years, when, falling into a dangerous illness, he made a vow that if he should recover he would apply himself solely to the study of divinity. He fulfilled his vow by becoming professor of divinity at Copenhagen and canon of Roskilde. He died on the 13th of July 1629 at Sorö in Zeeland.

Of his sons, Thomas (1616-1680) was born at Copenhagen, where, after a long course of study in various universities of Europe, he was appointed successively professor of mathematics (1647) and anatomy (1648). During his tenure of the latter chair he distinguished himself by observations on the lymphatics. In 1661 he retired to Hagestaed. In 1670 his house and library were burnt, and in consideration of his loss he was appointed physician to the king, with a handsome salary, and librarian to the university of Copenhagen. He died at Hagestaed in 1680. Another son, Erasmus (1625-1698), born at Roskilde, spent ten years in visiting England, Holland, Germany and Italy, and filled the chairs of mathematics and medicine at Copenhagen. He discovered double refraction in Iceland spar (*Experimenta crystalli islandici disdiaclastici*, Copenhagen, 1669). He died at Copenhagen in 1698. In the third generation Caspar Thomeson (1655-1738), son of Thomas, also taught anatomy at Copenhagen, his name being associated with the description of one of the ducts of the sublingual gland and of the *glandulae Bartholini*, while his younger brother, Thomas (1659-1690), was a student of northern antiquities who published *Antiquitatum Danicarum libri tres* in 1689.

BARTHOLOMEW, SAINT, one of the twelve apostles, regarding whose early life we know nothing, unless in accordance with a widely-spread belief he is to be identified with Nathanael (q.v.). If so, Bartholomew is probably a patronymic, the apostle's full name being Nathanael Bartolmai, *i.e.* the son of Tolmai. On the other hand, according to a Syrian tradition, Bartholomew's original name was Jesus, which he dropped owing to its being the name of the Master Himself. In the synoptic gospels Bartholomew is never mentioned except in the lists of the apostles, where his name always appears after Philip's. He is said to have gone, after the ascension of the Lord, on a missionary tour to India (then a very wide geographical designation) where, according to a story in Eusebius (H.E. v. 10), he left behind him a copy of St Matthew's gospel. According to the traditional account he was flayed alive and then crucified with his head downwards, at Albanopolis in Armenia, or, according to Nicephorus, at Urbanopolis in Cilicia. In works of art he is generally represented with a large knife, the instrument of his martyrdom, or, as in Michelangelo's "Last Judgment," with his own skin hanging over his arm. The festival of St Bartholomew is celebrated on the 24th of August.

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Dr. Nestle has drawn attention to the fact that in the Syriac translation of Eusebius' history the name Tolmai, *i.e.* Bartholomew, takes the place of Matthias, the apostle who was appointed in place of Judas (i. 12, cf. ii. 1, iii. 25 and 29). If this identification can be made out there would, in the list of apostles as finally constituted, be two men who bore the patronymic Bartholomew. See further *Expository Times*, ix. pp. 566 ff. (1898).

BARTHOLOMEW, JOHN (1831-1893), Scottish cartographer, was born at Edinburgh on the 25th of December 1831. His father had a cartographical establishment there and he was educated in the work. He was subsequently assistant to the German geographer August Petermann, until in 1856 he took up the management of his father's firm. For this establishment, now known as the Edinburgh Geographical Institute, Bartholomew built up a reputation

unsurpassed in Great Britain for the production of the finest cartographical work. Among his numerous publications mention may be specially made of the series of maps of Great Britain reduced from the Ordnance Survey to scales of $\frac{1}{2}$ in. and $\frac{1}{4}$ in. to 1 m., with relief shown by contours and a systematic scale of colours. The $\frac{1}{2}$ in. series, which was extended (and its principles applied to many other works) by Mr. J. G. Bartholomew, who succeeded his father in the business, is the finest of its kind ever produced. John Bartholomew died in London on the 29th of March 1893.

BARTHOLOMEW FAIR, a fair held in West Smithfield, London, on St Bartholomew's Day (24th of August, O.S.) from 1133 to 1855. The charter authorizing its holding was granted by Henry I. to his former minstrel, Rahere, who had taken orders and had founded the priory of St Bartholomew close by. For many centuries the fair lasted a fortnight, but in 1691 it was shortened to four days only. In 1641 it had become so large that it involved no less than four parishes: Christ Church, Great and Little St Bartholomew's and St Sepulchre's. It was customary for the lord mayor of London to open the fair formally on St Bartholomew's Eve, and on his way to stop at Newgate where he received from the governor a cup of sack. In 1753, owing to the change in the calendar, the fair was proclaimed on the 3rd of September. During its earlier history the fair grew to be a vast national market and the chief cloth sale in the kingdom. Down to 1854 it was usual for the representative of the Merchant Taylors' Gild to proceed to the cloth fair which formed part of Bartholomew fair, and test the measures used for selling cloth there by the company's silver yard. The fair was finally closed in 1855.

For a full account see Prof. H. Morley, Memoirs of Bartholomew Fair (1859).

BARTIZAN (according to the *New English Dictionary*, from *bertizene*, a Scottish corruption of "bratticing" or "brattishing," from O. Fr. *bretesche*, and meaning a battlemented parapet; apparently first used by Sir Walter Scott), a small battlemented turret, corbelled out at the angle of a wall or tower to protect a warder and enable him to see around him. Bartizans generally are furnished with oylets or arrow-slits.

BARTLETT, JOHN (1820-1905), American publisher and compiler, was born in Plymouth, Massachusetts, on the 14th of June 1820. He became a bookseller and publisher in Cambridge, Mass., and from 1865 to 1889, when he retired, was a member of the bookselling and publishing firm of Little, Brown & Co., in Boston. In 1855 he published the first edition of his Familiar Quotations, subsequently greatly expanded and long the best-known collection of the sort, and in 1894 (although it had been copyrighted five years before), after many years' labour, he published his New and Complete Concordance or Verbal Index to Words, Phrases and Passages in the Dramatic Works of Shakespeare; with a Supplementary Concordance to the Poems—surpassing any of its predecessors in the number and fulness of its citations from the poet's writings.. In all of his work he was greatly assisted by his wife, a daughter of Sidney Willard (1780-1856), professor of Hebrew at Harvard from 1807 to 1831. Bartlett died at Cambridge, Mass., on the 3rd of December 1905.

BARTLETT, JOHN RUSSELL (1805-1886), American historical and linguistic student, was born in Providence, Rhode Island, on the 23rd of October 1805. From his first to his eighteenth year he lived in Kingston, Canada; he was then in turn, from 1824 to 1836, a clerk in a dry goods store, a book-keeper and a bank cashier at Providence, and for more than ten years after 1836 he was a bookseller in New York City, returning to Providence in 1850. In 1850-1853 he was the commissioner on the part of the United States for the survey of the boundary between the United States and Mexico, but owing to the lack of funds did not finish the work. After being superseded by another commissioner upon the accession of President Franklin Pierce, he published A Personal Narrative of Explorations and Incidents in Texas, New Mexico, California, Sonora and Chihuahua (2 vols., 1854), which contains much valuable scientific and historical material concerning the south-west. From 1855 to 1872 he was secretary of state of Rhode Island, and while serving in this capacity thoroughly re-arranged and classified the state records, and prepared various bibliographies and compilations, relating chiefly to the history of the state. He is chiefly remembered however, for his Dictionary of Americanisms (1848), a pioneer work, which, although later dialect changes have, of course, deprived it of completeness or final authoritativeness, is still of value to students of language and remains the chief contribution to the subject. He died in Providence on the 28th of May 1886.

BARTLETT, PAUL WAYLAND (1865-), American sculptor, was born in New Haven, Connecticut, the son of Truman H. Bartlett, an art critic and sculptor. When fifteen he began to study at Paris under Frémiet, modelling from animals in the Jardin des Plantes. He won a medal at the Paris Salon of 1887. Among his principal works are: "The Bear Tamer," in the Metropolitan Museum of Art, New York; the equestrian statue of Lafayette, in the Place du Carrousel, Paris, presented to the French Republic by the school children of America; the powerful and virile Columbus and Michelangelo, in the Congressional Library, Washington, D.C.; the "Ghost Dancer," in the Pennsylvania Academy, Philadelphia; the "Dying Lion"; the equestrian statue of McClellan in Philadelphia; and a statue of Joseph Warren in Boston, Massachusetts. His bronze patinas of reptiles, insects and fish are also remarkable.

BARTOLI, DANIELLO (1608-1685), Italian Jesuit priest, was born at Ferrara and entered the Society of Jesus in 1623. Debarred from the foreign mission field, he attained high distinction as a preacher and as a teacher of rhetoric in Genoa, Florence and Rome. He wrote (in Italian) a book called *The Learned Man* as a counterblast to the widespread reading of romances, and also a history of his order in 6 vols. (Rome, 1650-1673), which is particularly informing with regard to

the early work of the society in Asia. He died at Rome.

A collected edition of his works, in 12 vols., was published by Marietti at Turin, 1825-1856; another in 50 vols. at Florence in 1826.

BARTOLINI, LORENZO (1777-1850), Italian sculptor, was born in Vernio in Tuscany. After acquiring great skill and reputation as a modeller in alabaster, he went in 1797 to Paris, where he studied painting under Desmarets, and afterwards sculpture under F. F. Lemot. The bas-relief "Cleobis and Biton," with which he gained the second prize of the Academy in 1803, at once established his fame as a sculptor and gained for him a number of influential patrons. He executed many minor pieces for Denon, besides busts of Méhul and Cherubini. His great patron, however, was Napoleon, for whom he executed a colossal bust, and who sent him to Carrara to found a school of sculpture. Here he remained till after the fall of Napoleon, and then took up his residence in Florence, where he resided till his death. His works are varied and include an immense number of busts. The best are, perhaps, the group of Charity, the "Hercules and Lichas" and the "Faith in God," which exemplify the highest types of Bartolini's style. Popular opinion in Italy associates his qualities as a sculptor with those of Thorwaldsen and Canova.

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BARTOLOMMEI, MARQUIS FERDINANDO (1821-1869), Italian revolutionist and statesman, who played an important part in the political events of Tuscany from 1848 to 1860. From the beginning of the revolutionary movement Bartolommei was always an ardent Liberal, and although belonging to an old and noble Florentine family his sympathies were with the democratic party rather than with the moderately liberal aristocracy. In 1847-1848 his house was a centre of revolutionary committees, and during the brief constitutional régime he was much to the fore. After the return of the grand duke Leopold II. in 1849 under Austrian protection, Bartolommei was present at a requiem service in the church of Santa Croce for those who fell in the late campaign against Austria; on that occasion disorders occurred and he was relegated to his country estate in consequence (1851). Shortly afterwards he was implicated in the distribution of seditious literature and exiled from Tuscany for a year. He settled at Turin for a time and established relations with Cavour and the Piedmontese liberals. He subsequently visited France and England, and like many Italian patriots became enamoured of British institutions. He returned to Florence in 1853; from that time onward he devoted himself to the task of promoting the ideas of Italian independence and unity among the people, and although carefully watched by the police, he kept a secret printing-press in his palace in Florence. Finding that the nobility still hesitated at the idea of uncompromising hostility to the house of Lorraine, he allied himself more firmly with the popular party, and found an able lieutenant in the baker Giuseppe Dolfi (1818-1869), an honest and whole-hearted enthusiast who had great influence with the common people. As soon as war between Piedmont and Austria appeared imminent, Bartolommei organized the expedition of Tuscan volunteers to join the Piedmontese army, spending large sums out of his own pocket for the purpose, and was also president of the Tuscan branch of the Società Nazionale (see under La Farina and Cavour). He worked desperately hard conspiring for the overthrow of the grand duke, assisted by all the liberal elements, and on the 27th of April 1859, Florence rose as one man, the troops refused to fire on the people, and the grand duke departed, never to return. Sapristi! pas un carreau cassé! was the comment of the French minister to Tuscany on this bloodless revolution. A provisional government was formed and Bartolommei elected gonfaloniere. He had much opposition to encounter from those who still believed that the retention of the grand duke as a constitutional sovereign and member of an Italian confederation was possible. In the summer elections were held, and on the meeting of parliament Bartolommei's Unitarian views prevailed, the assembly voting the resolution that the house of Lorraine had forfeited its rights and that Tuscany must be united to Italy under King Victor Emmanuel. Bartolommei was made senator of the Italian kingdom and received various other honours. His last years were spent in educational and philanthropic work. He died on the 15th of June 1869, leaving a widow and two daughters.

The best biography of Bartolommei is contained in *Il Rivolgimento Toscano e l'azione popolare*, by his daughter Matilde Gioli (Florence, 1905), but the author attributes perhaps an undue preponderance to her father in the Tuscan revolution, and is not quite fair towards Bettino Ricasoli (*q.v.*) and other leaders of the aristocratic party. Cf. *Lettere e documenti di B. Ricasoli* (Florence, 1887-1896), and D. Zanichelli's *Lettere politiche di B. Ricasoli, U. Peruzzi, N. Corsini, e C. Ridolfi* (Bologna, 1898).

BARTOLOMMEO DI PAGHOLO, FRA (1475-1517), the Italian historical and portrait painter,—known also as Baccio (short for Bartolommeo) Bella Porta (because he lived near the Porta Romana) was born at Soffignano, near Florence, in 1475, and died at Florence in 1517. He received the first elements of his artistic education from Cosimo Roselli; and after leaving him, devoted himself to the study of the great works of Leonardo da Vinci. Of his early productions, which are distinguished for their grace and beauty, the most important is the fresco of the Last Judgment, in which he was assisted by his friend Mariotto Albertinelli. While he was engaged upon some pieces for the convent of the Dominican friars, he made the acquaintance of Savonarola, who quickly acquired great influence over him, and Bartolommeo was so affected by his cruel death, that he soon after entered the convent, and for some years gave up his art. He had not long resumed it, in obedience to his superior, when Raphael came to Florence and formed a close friendship with him. Bartolommeo learned from the younger artist the rules of perspective, in which he was so skilled, while Raphael owes to the *frate* the improvement in his colouring and handling of drapery, which was noticeable in the works he produced after their meeting. Some years afterwards he visited Rome, and was struck with admiration and a feeling of

his own inferiority when he contemplated the masterpieces of Michelangelo and Raphael. With the latter, however, he remained on the most friendly terms, and when he departed from Rome, left in his hands two unfinished pictures which Raphael completed. Fra Bartolommeo's figures had generally been small and draped. These qualities were alleged against him as defects, and to prove that his style was not the result of want of power, he painted the magnificent figure of St Mark (his masterpiece, at Florence), and the undraped figure of St Sebastian. The latter was so well designed, so naturally and beautifully coloured, and so strongly expressive of suffering and agony, that it was found necessary to remove it from the place where it had been exhibited in the chapel of a convent. The majority of Bartolommeo's compositions are altar-pieces. They are remarkable for skill in the massing of light and shade, richness and delicacy of colouring, and for the admirable style in which the drapery of the figures is handled, Bartolommeo having been the first to introduce and use the lay-figure with joints.

BARTOLOZZI, FRANCESCO (1725-1815), Italian engraver, was born at Florence. He was originally destined to follow the profession of his father, who was a gold- and silver-smith; but he manifested so much skill and taste in designing that he was placed under the superintendence of two Florentine artists, who instructed him in painting. After devoting three years to that art, he went to Venice and studied engraving. He made very rapid progress, and executed some works of considerable importance at Venice.. He then removed for a short time to Rome, where he completed a set of engravings representing events from the life of St Nilus, and, after returning to Venice, set out for London in 1764. For nearly forty years he resided in London, and produced an enormous number of engravings, the best being those of Clytie, after Annibale Caracci, and of the Virgin and Child, after Carlo Dolce. A great proportion of them are from the works of Cipriani and Angelica Kauffmann. Bartolozzi also contributed a number of plates to Boydell's *Shakespeare Gallery*. In 1802 he was invited to Lisbon as director of the National Academy. He remained in Portugal till his death. His son Gaetano Stephano (1757-1821), also an engraver, was the father of Madame Vestris.

BARTOLUS (1314-1357), Italian jurist, professor of the civil law at the university of Perugia, and the most famous master of the dialectical school of jurists, was born in 1314, at Sassoferrato, in the duchy of Urbino, and hence is generally styled Bartolus de Saxoferrato. His father was Franciscus Severi, and his mother was of the family of the Alfani. He studied the civil law first of all under Cinus at Perugia, and afterwards under Oldradus and Jacobus de Belvisio at Bologna, where he was promoted to the degree of doctor of civil law in 1334. His great reputation dates from his appointment to a chair of civil law in the university of Perugia, 1343, where he lectured for many years, raising the character of the law school of Perugia to a level with that of Bologna. He died in 1357 at Perugia, where a magnificent monument recorded the interment of his remains in the church of San Francisco, by the simple inscription of "Ossa Bartoli." Bartolus left behind him a great reputation, and many writers have sought to explain the fact by attributing to him the introduction of the dialectical method of teaching law; but this method had been employed by Odofredus, a pupil of Accursius, in the previous century, and the successors of Odofredus had abused it to an extent which has rendered their writings in many instances unprofitable to read, the subject matter being overlaid with dialectical forms. It was the merit of Bartolus, on the other hand, that he employed the dialectical method with advantage as a teacher, and discountenanced the abuse of it; but his great reputation was more probably owing to the circumstance that he revived the exegetical system of teaching law (which had been neglected since the ascendancy of Accursius) in a spirit which gave it new life, whilst he imparted to his teaching a practical interest, from the judicial experience which he had acquired while acting as assessor to the courts at Todi and at Pisa before he undertook the duties of a professorial chair. His treatises On Procedure and On Evidence are amongst his most valuable works, whilst his Commentary on the Code of Justinian has been in some countries regarded as of equal authority with the code itself.

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BARTON, BENJAMIN SMITH (1766-1815), American naturalist, was born at Lancaster, Pennsylvania, in 1766, studied for two years at Edinburgh, and afterwards graduated at Göttingen. He settled at Philadelphia, and soon obtained a considerable practice. In 1789 he was appointed professor of botany and natural history in the College of Philadelphia, now the University of Pennsylvania; he was made professor of *materia medica* in 1795, and on the death of Dr Benjamin Rush in 1813 he obtained the chair of practical medicine. In 1802 he was chosen president of the American Philosophical Society, of which he was a strong supporter. Barton was the author of various works on natural history, botany and *materia medica*, his *Elements of Botany* (1803) being the best known. He died at Philadelphia on the 19th of December 1815.

BARTON, BERNARD (1784-1849), English poet, was born at Carlisle on the 31st of January 1784. His parents were Quakers, and he was commonly known as the Quaker poet. After some experience of business, he became, in 1809, clerk to Messrs Alexander's bank at Woodbridge, Suffolk, and retained this post till his death. His first volume of verse—Metrical Effusions—was published in 1812. It brought him into correspondence with Southey, and shortly afterwards, through the medium of a set of complimentary verses, he made the acquaintance of Hogg. From this time onwards to 1828 Barton published various volumes of verse. After 1828 his work appeared but rarely in print, but his Household Verses published in 1845 secured him, on the recommendation of Sir Robert Peel, a Civil List pension of £100 a year, £1200 having already been raised for him by some members of the Society of Friends. Barton is chiefly remembered for his friendship with Charles Lamb, which arose, curiously enough, out of a remonstrance addressed by him to the author of Essays of Elia on the freedom with which the Quakers had been handled in that volume. When Barton contemplated resigning his bank clerkship and

supporting himself entirely by literature, Lamb strongly dissuaded him. "Keep to your bank," he wrote, "and the bank will keep you." Barton died at Woodbridge on 19th February 1849. His daughter Lucy married Edward FitzGerald.

See Poems and Letters of Bernard Barton, selected by Lucy Barton, with a biographical notice by Edward FitzGerald (1849).

BARTON, CLARA (1821-), American philanthropist, was born in Oxford, Massachusetts, in 1821. She was educated at the Clinton Liberal Institute (then in Clinton, New York). Ill-health compelled her to give up the profession of teaching, which she had taken up when she was only sixteen years old, and from 1854 to 1857 she was a clerk in the Patent Office at Washington. During the Civil War she distributed large quantities of supplies for the relief of wounded soldiers; and at its close she organized at Washington a bureau of records to aid in the search of missing men for whom inquiries were made. In connexion with this work, which was continued for about four years, she identified and marked the graves of more than twelve thousand soldiers in the National Cemetery at Andersonville, Georgia. In 1869 she went for her health to Switzerland. Upon her arrival at Geneva she was visited by members of the International Committee of the Red Cross, who sought her co-operation in the work of their society. The United States had declined to become a party to the treaty of Geneva on the basis of which the Red Cross Society was founded, but upon the outbreak of the Franco-Prussian War Miss Barton went with members of this society to the seat of hostilities and assisted them in organizing their military hospitals. In 1871 she superintended the distribution of relief to the poor in Strassburg, and in 1872 performed a like service in Paris. For her services she was decorated with the Iron Cross by the German emperor. In 1873 she returned to the United States, where she at once began her efforts to effect the organization of the United States branch of the Red Cross and to bring her country into the treaty of Geneva, which efforts were successful in 1881-1882. She was the first president of the American Red Cross, holding the position until 1904: and represented the United States at the International conference held at Geneva, 1884; Karlsruhe, 1887; Rome, 1892; Vienna, 1897; and St Petersburg, 1903. She was the author of the American amendment to the constitution of the Red Cross which provides that the society shall distribute relief not only in war but in times of such other calamities as famines, floods, earthquakes, cyclones, and pestilence, and in accordance with this amended constitution, she conducted the society's relief for sufferers from the yellow fever in Florida (1887), the flood at Johnstown, Pennsylvania (1889), the famine in Russia (1891), the hurricane along the coast of South Carolina (1893), the massacre in Armenia (1896), the Spanish-American War in Cuba (1898), the hurricane at Galveston, Texas (1900), and several other calamities. Upon her retirement from the Red Cross she incorporated and became president of "The National First Aid of America" for "first aid to the injured." She wrote An Official History of the Red Cross (1882), The Red Cross in Peace and War (1898), A Story of the Red Cross (1904), and Story of my Childhood (1907).

BARTON, ELIZABETH (c. 1506-1534), "the maid of Kent," was, according to her own statement, born in 1506 at Aldington, Kent. She appears to have been a neurotic girl, subject to epilepsy, and an illness in her nineteenth year resulted in hysteria and religious mania. She was at the time a servant in the house of Thomas Cobb, steward of an estate near Aldington owned by William Warham, archbishop of Canterbury. During her convalescence she passed into trances lasting for days at a time, and in this state her ravings were of such "marvellous holiness in rebuke of sin and vice" that the country folk believed her to be inspired. Cobb reported the matter to Richard Masters, the parish priest, who in turn acquainted Archbishop Warham. The girl having recovered, and finding herself the object of local admiration, was cunning enough, as she confessed at her trial, to feign trances, during which she continued her prophecies. Her fame steadily growing, the archbishop in 1526 instructed the prior of Christ Church, Canterbury, to send two of his monks to hold an inquiry into the case. One of these latter, Edward Bocking, obtained her admission as a nun to St Sepulchre's convent, Canterbury. Under Bocking's instruction Barton's prophecies became still more remarkable, and attracted many pilgrims, who believed her to be, as she asserted, in direct communication with the Virgin Mary. Her utterances were cunningly directed towards political matters, and a profound and widespread sensation was caused by her declaration that should Henry persist in his intention of divorcing Catherine he "should no longer be king of this realm ... and should die a villain's death." Even such men as Fisher, bishop of Rochester, and Sir Thomas More, corresponded with Barton. On his return from France in 1532 Henry passed through Canterbury and is said to have allowed the nun to force herself into his presence, when she made an attempt to terrify him into abandoning his marriage. After its solemnization in May 1533. her utterances becoming still more treasonable, she was examined before Cranmer (who had in March succeeded to the archbishopric on Warham's death) and confessed. On the 25th of September Bocking and another monk, Hadley, were arrested, and in November, Masters and others were implicated. The maid and her fellow prisoners were examined before the Star Chamber, and were by its order publicly exposed at St Paul's Cross, where they each read a confession. In January 1534 by a bill of attainder the maid and her chief accomplices were condemned to death, and were executed at Tyburn on the 20th of April. It has been held that her confession was extracted by force, and therefore valueless, but the evidence of her imposture seems conclusive.

See Froude, *History of England*; Burnet, *History of the Reformation*; Lingard, *History of England*; F. A. Gasquet, *Henry VIII.* and the English Monasteries (ch. iii. 1899 ed.); T. E. Bridgett, *Life of Blessed John Fisher* (1888); vols. vi. and vii. of *Letters and Papers of Henry VIII.*; James Gairdner, *The English Church in the 16th Century* (1899); Strype, *Memorials*, I. i. 271, and *Cranmer*; a detailed account of the case is contained in the published Act of Attainder 25 Henry VIII. c. 12.

BARTON BEDS, in geology, the name given to a series of softish grey and brown clays, with layers of sand, of Upper Eocene age, which are found in the Hampshire Tertiary basin, where they are particularly well exposed in the cliffs of Barton, Hordwell, and in the Isle of Wight. Above the highly fossiliferous Barton Clay there is a sandy series with few fossils; these are the Headon Hill or Barton Sands. Either of these names is preferable to the term "Upper Bagshot Beds," which has been applied to these sands. The Barton Beds are absent from the London basin, and the Upper Bagshot Sands of that area are probably at a lower horizon than the Barton Sands. The term "Bartonien" was introduced by Mayer-Eymar in 1857 for the continental equivalents of the series.

Hampshire basin and
Isle of Wight.

Barton Sands 140-200 ft.
Barton Clay 162-255 ft Bartonien { Limestone of St. Ouen.
Sands of Beauchamp (sables moyen).

Fusus longaevus, Volutilithes luctatrix, Ostrea gigantea, Pectunculus (Glycimeris) deleta are characteristic fossils; fishes (Lamna, Arius, &c.) and a crocodile (Diplocynodon) are also found in the Barton Clay. The sands are very pure and are used in glass making.

See "Geology of the Isle of Wight," *Mem. Geol. Survey* (2nd ed., 1889); and "The Geology of the Country around Southampton," *Mem. Geol. Survey* (1902).

(J. A. H.)

BARTON-UPON-HUMBER, a market town in the N. Lindsey or Brigg parliamentary division of Lincolnshire, England, the terminus of a branch of the Great Central railway, 44 m. N. by E. of Lincoln. Pop. of urban district (1901) 5671. It lies beneath low hills, on flat ground bordering the Humber, but the centre of the town is a mile from the river. The church of St Peter has a remarkable west tower of pre-Conquest workmanship, excepting the early Norman top storey. Against the western face is a low building of the date of the lower tower-storeys, measuring 15 ft. by 12, with rude, deeply-splayed windows. The tower itself is arcaded in the two lower storeys, having round arches in the lower and triangular in the upper, and there is a round-headed S. doorway and a triangular-headed N. doorway. The rest of the church is Decorated and Perpendicular. The church of St Mary is fine Early English with Perpendicular clerestory. Industries include brick-making, malting, and rope-making. Barton appears in Domesday, when the ferry over the Humber existed. As a port, moreover, it subsequently rose into some importance, for it was able to supply eight ships and men to the expedition of Edward III. to Brittany.

BARUCH, the name (meaning "Blessed" in Hebrew) of a character in the Old Testament (Jer. xxxvi., xxxvii., xliii.), associated with the prophet Jeremiah, and described as his secretary and spokesman.

Book of Baruch. This deutero-canonical book of the Old Testament is placed by the LXX. between *Jeremiah* and *Lamentations*, and in the Vulgate after *Lamentations*. It consists of several parts, which cohere so badly that we are obliged to assume plurality of authorship.

Contents.—The book consists of the following parts:—

- i. 1-14. The historical preface with a description of the origin and purpose of the book.
- i. 15-ii. 5. A confession of sin used by the Palestinian Remnant. This confession was according to i. 14 sent from Babylon (i. 4, 7) to Jerusalem to be read "on the day of the feast and on the days of the solemn assembly." The confession is restricted to the use of the remnant at home (see next paragraph). In this confession there is a national acknowledgment of sin and a recognition of the Exile as a righteous judgment.
- ii. 6-iii. 8. A confession of the captives in Babylon and a prayer for restoration. This confession opens as the former (in i. 15) with the words found also in Daniel ix. 7, "To the Lord our God belongeth righteousness, &c." The confession is of the Exiles and not of the remnant in Palestine, as Marshall has pointed out. Thus it is the Exiles clearly who are speaking in ii. 13, "We are but a few left among the heathen where thou hast scattered us"; ii. 14, "Give us favour in the sight of them which have led us away captive"; iii. 7, "We will praise thee in our captivity"; iii. 8, "We are yet this day in our captivity where thou hast scattered us." On the other hand the speakers in the confession in i. 15-ii. 5 are clearly the remnant in Jerusalem. i. 15, "To the Lord our God belongeth righteousness, but unto us confusion of face ... to the men of Judah and the inhabitants of Jerusalem." The Exiles are mentioned by way of contrast to the speakers; ii. 4, 5, "He hath given them to be in subjection to all the kingdoms that are round about us to be a reproach among all the people round about where the Lord hath scattered them. Thus were they cast down ... because we sinned against the Lord our God."^[1]
- iii. 9-iv. 4. The glorification of wisdom, that is, of the Law. Israel is bidden to walk in the light of it; it is the glory of Israel and is not to be given to another.
- iv. 5-v. 9. Consolation of Israel with the promise of deliverance and lasting happiness and blessing to Jerusalem.

Integrity.—From the foregoing description it seems clear that the book is derived from a plurality of authors. Most scholars, such as Fritzsche, Hitzig, Kneucker, Hilgenfeld, Reuss, agree in

assuming that i.-iii. 8 and iii. 9-v. 9 are from distinct writers. But some critics have gone farther. Thus Rothstein (Kautzsch, *Apok. und Pseud.* i. 213-215) holds that there is no unity in iii. 9-v. 9, but that it is composed of two independent writings—iii. 9-iv. 4 and iv. 5-v. 9. Marshall (Hastings' *Bible Dictionary*, i. 251-254) gives a still more complex analysis. He finds in it the work of four distinct writers: i. 1-14, i. 15-iii. 8, iii. 9-iv. 4, iv. 5-v. 9. The evidence for a fourfold authorship is strong though not convincing. In any case i.-iii. 8 and iii. 9-v. 9 must be ascribed to different authors.

Original Language.—(1) Some scholars, as Ewald, Kneucker, Davidson, Rothstein and König, believe that the whole book was originally written in Hebrew; (2) Fritzsche, Hilgenfeld, Reuss, Gifford, Schürer, and Toy advocate a Hebrew original of i.-iii. 8 and a Greek original of the rest; (3) Marshall argues that i.-iii. 8 is translated from a Hebrew original, iii. 9-iv. 4 from an Aramaic, and the rest from the Greek; (4) and lastly, Bertholdt, Havernick and Nöldeke regard the Greek as the primitive text. The last view must be put aside as unworkable. For the third no convincing evidence has been adduced, nor does it seem likely that any can be. We have therefore to decide between the two remaining theories. In any case we can hardly err in admitting a Hebrew original of i.-iii. 8. For (1) we have such Hebraisms as o $\tilde{0}$... έ π ' α $\tilde{0}$ τ $\tilde{0}$... $\tilde{0}$... $\tilde{0}$... $\tilde{0}$... $\tilde{0}$ $\tilde{0}$... $\tilde{0}$... $\tilde{0}$ $\tilde{0}$... $\tilde{0}$ $\tilde{0}$... ἐκει̃ = שם ... שם (ii. 4, 13, 29; iii. 8); ὧν ... τὸ πνεῦμα αὐτῶν = שם ... אשר ... אשר (ii. 7). (2) We have meaningless expressions which are really mistranslations of the Hebrew. It is noteworthy that these mistranslations are for the most part found in Jeremiah—a fact which has rightly drawn scholars to the conclusion that we owe the LXX of Baruch i.-iii. 8, and of Jeremiah to the same translator. Thus in i. 9 we have δεσμώτης, "prisoner," where the text had מֵסְגֵר and the Greek should have been rendered "locksmith." The same mistranslation is found in Jer. xxiv. 1, xxxvi. (xxix.) 2. Next in ii. 4 we have ἄβατον, "wilderness," where the text had wand the translation should have ἔκστασιν. The same misrendering is found several times in Jeremiah. Again ἐργάζεσθαι is used in i. 22, ii. 21, 22, 24 as a translation of ν in the sense of "serving," where δουλεύειν ought to have been the rendering. So also in Jer. xxxiv. (xxvii.) 11, xxxvii. (xxx.) 8, &c. Again in πόλεων Ἰούδα καὶ ἔξωθεν Ἰερουσαλήμ the ἔξωθεν is a misrendering of as in Jer. xi. 6, xl. (xxxiii.) 10, &c., where the translator should have given πλατειῶν.^[2] For βόμβησις (ii. 29) we should have πλῆθος. (3) Finally there are passages where by re-translation we discover that the translator either misread his text or had a corrupt text before him. Thus $\mu \dot{\alpha} \nu \nu \alpha$ in i. 10 is a corrupt translation of מנחה as elsewhere in a dozen passages of the LXX. In iii. 4 τεθνηκότων = שְׁתֵי – which the translator should have read as מְתֵי = ἀνθρώπων.

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From the above instances, which could be multiplied, we have no hesitation in postulating a Hebrew original of i.-iii. 8.

As regards iii. 9-v. 9 the case is different. This section is free from such notable Hebraisms as we have just dealt with, and no convincing grounds have been advanced to prove that it is a translation from a Semitic original.

Date.—The dates of the various constituents of the book are quite uncertain. Ewald, followed by Gifford and Marshall, assigns i.-iii. 8 to the period after the conquest of Jerusalem by Ptolemy I. in 320 B.C.; Reuss to some decades later; and Fritzsche, Schrade, Keil and Toy to the time of the Maccabees. Hitzig, Kneucker and Schürer assume that it was written after A.D. 70. Ryle and James (Pss. of Solomon, pp. lxxii.-lxxvii.) hold that iv. 31-v. 9 is dependent on the Greek version of Ps. xi., and that, accordingly, Baruch was reduced to its present form after A.D. 70. The most probable of the above dates appears to be that maintained by Fritzsche, that is, if we understand by the Maccabean times the early decades of the 2nd cent. B.C. For during the palmy days of the Maccabean dynasty the Twelve tribes were supposed to be in Palestine. The idea that the Jewish Kingdom embraced once again the entire nation easily arose when the Maccabees extended their dominion northwards over Samaria and Galilee and eastwards beyond the Jordan. This belief displaced the older one that the nine and a half tribes were still in captivity. With the downfall of the Maccabean dynasty, however, the older idea revived in the 1st cent. A.D. To the beginnings of the 2nd cent. A.D. the view of the dead given in ii. 17 would point, where it is said that those whose spirits had been taken from their bodies would not give glory unto the Lord. The statement as to the desolate condition of the Temple in ii. 26a is with Kneucker to be rejected as an interpolation.

Canonicity.—The Book of Baruch was never accepted as canonical by the Palestinian Jews (Baba Batra 14^b), though the *Apostolic Constitutions*, v. 10, state that it was read in public worship on the 10th day of the month Gorpiaeus, but this statement can hardly be correct. It was in general use in the church till its canonicity was rejected by the Protestant churches and accepted by the Roman church at the council of Trent.

Literature. Versions and Editions.—The versions are the two Latin, a Syriac, and an Arabic. The Latin one in the Vulgate belongs to a time prior to Jerome, and is tolerably literal. Another, somewhat later, was first published by Jos. Maria Caro in 1688, and was reprinted by Sabatier, side by side with the ante-Hieronymian one, in his *Bibliorum Sacrorum Latinae Versiones Antiquae*. It is founded upon the preceding one, and is less literal. The Syriac and Arabic versions, printed in the London Polyglot, are literal. The Hexaplar-Syriac version made by Paul, bishop of Tella, in the beginning of the 7th century has been published by Ceriani.

The most convenient editions of the Greek text are Tischendorf's in the second volume of his Septuagint, and Swete's in vol. iii.; Fritzsche's in *Libri Apocryphi Veteris Testamenti Graece* (1871). The best editions of the book are Kneucker's *Das Buch Baruch* (1879); Gifford's in the *Speaker's Apoc.* ii. See also the articles in the *Encyc. Biblica, Hastings' Bible Dictionary*; Schürer,

Apocalypse of Baruch. The discovery of this long lost apocalypse was due to Ceriani. This apocalypse has survived only in the Syriac version of which Ceriani discovered a 6th century MS. in the Milan library. Of this he published a Latin translation in 1866 (*Monumenta Sacra*, I. ii. 73-98), which Fritzsche reproduced in 1871 (*Libri Apocryphi V. T.*, pp.654-699), and the text in 1871 (*Mon. Sacra.* V. ii. 113-180), and subsequently in photo-lithographic facsimile in 1883. Chaps. lxxviii.-lxxxvi., indeed, of this book have long been known. These constitute Baruch's epistle to the nine and a half tribes in captivity, and have been published in Syriac and Latin in the London and Paris Polyglots, and in Syriac alone from one MS. in Lagarde's *Libri V. T. Apocryphi Syr.* (1861); and by Charles from ten MSS. (*Apocalypse of Baruch*, 1896, pp. 124-167). The entire book was translated into English by the last-named writer (*op. cit.* pp. 1-167), and into German by Ryssel (Kautzsch's *Apok. und Pseud.*, 1900, ii. pp. 413-446).

The Syriac is translated from the Greek; for Greek words are occasionally transliterated, and passages can be explained only on the hypothesis that the wrong alternative meanings of certain Greek words were followed by the translator. The Greek in turn is derived from the Hebrew, for unintelligible expressions in the Syriac can be explained and the text restored by retranslation into Hebrew. Thus in xxi. 9, 11, 12, xxiv. 2, lxii. 7 we have an unintelligible antithesis, "those who sin and those who are justified." The source of the error can be discovered by retranslation. The Syriac in these passages is a stock rendering of δικαιοῦσθαι, and this in turn of צדק. But צדק means not only δικαιοῦσθαι but also δίκαιος εἶναι, and this is the very meaning required by the context in the above passages: "those who sin and those who are righteous." [3] Again xliv. 12 the text reads: "the new world which does not turn to corruption those who depart on its beginning and has no mercy on those who depart to torment." Here "on its beginning" is set over antithetically against "to torment," whereas the context requires "to its blessedness." The words "on its beginning"—באשרו, a corruption of באשרו"to its blessedness." Again in lvi. 6 it is said that the fall of man brought grief, anguish, pain, trouble and boasting into the world. The term "boasting" in this connexion cannot be right. The word = $\kappa\alpha\dot{\nu}$ (?), corrupt for מחלה, "disease." A further ground for inferring a Hebrew original is to be found in the fact that paronomasiae not infrequently discover themselves in the course of retranslation into Hebrew. One instance will suffice. In xlviii. 35, "Honour will be turned into shame, strength humiliated into contempt ... and beauty will become a scorn" contains three such:

כבוד יהפך לקלון עז יורדוואצליבוה לדופי

(see Charles, *Apoc. Bar.* pp. xliv.-liii). The necessity of postulating a Hebrew original was first shown by the present writer, and has since been maintained by Wellhausen (*Skizzen u. Vorarbeiten*, vi. 234), by Ryssel (*Apok. und Pseudepig. A. T.*, 1900, ii. 411), and Ginzberg (*Jewish Encyclopaedia*, ii. 555).

Different Elements in the Book and their Dates.—As there are undoubtedly conflicting elements

in the book, it is possible to assume either a diversity of authorship or a diversity of sources. The latter view is advocated by Ryssel and Ginzberg, the former by Kabisch, de Faye, R. H. Charles and Beer (Herzog's Realenc., art. "Pseudepigraphen des Alten Testaments," p. 250). A short summary may here be given of the grounds on which the present writer has postulated a diversity of authorship. If the letter to the tribes in captivity (lxxviii.-lxxxvi.) be disregarded, the book falls into seven sections separated by fasts, save in one case (after xxxv.) where the text is probably defective. These sections, which are of unequal length, are—(1) i.-v. 6; (2) v. 7-viii.; (3) ix.-xii. 4; (4) xii. 5-xx.; (5) xxi.-xxxv.; (6) xxxvi.-xlvi.; (7) xlvii.-lxxvii. These treat of the Messiah and the Messianic kingdom, the woes of Israel in the past and the destruction of Jerusalem in the present, as well as of theological questions relating to original sin, free will, works, the number of the saved, the nature of the resurrection body, &c. The views expressed on several of the above subjects are often conflicting. In one class of passages there is everywhere manifest a vigorous optimism as to Israel's ultimate well-being on earth, and the blessedness of the chosen people in the Messianic kingdom is sketched in glowing and sensuous colours (xxix., xxxix.-xl., lxiii.-lxxiv.). Over against these passages stand others of a hopelessly pessimistic character, wherein, alike as to Israel's present and future destiny on earth, there is written nothing save "lamentation, and mourning, and woe." The world is a scene of corruption, its evils are irremediable, its end is nigh, and the advent of the new and spiritual world at hand. The first to draw attention to the composite elements in this book was Kabisch (Jahrbücher f. protest. Theol., 1891, pp. 66-107). This critic regarded xxiv. 3-xxix., xxxvi.-xl. and liii.-lxxiv. as independent sources written before the fall of Jerusalem, A.D. 70, and his groundwork, which consists of the rest of his book, with the exception of a few verses, as composed after that date. All these elements were put together by a Christian contemporary of Papias. Many of these conclusions were arrived at independently by a French scholar, De Faye (Les Apocalypses juives, 1892, pp. 25-28, 76-103, 192-204). The present writer (Apocalypse of Baruch, 1896, pp. liii.-lxvii.), after submitting the book to a fresh study, has come to the following conclusions:—The book is of Pharisaic authorship and composed of six independent writings—A¹, A², A³, B¹, B², B³. The first three were composed when Jerusalem was still standing and the Messiah and the Messianic kingdom were expected: A¹, a mutilated apocalypse = xxvii.-xxx. 1; A^2 , the Cedar and Vine Vision = xxxvi.-xl.; A^3 , the Cloud Vision = liii.lxxiv. The last three were written after A.D. 70, and probably before 90. Thus $B^3 = lxxxv$. was written by a Jew in exile, who, despairing of a national restoration, looked only for a spiritual recompense in heaven. The rest of the book is derived from B¹ and B², written in Palestine after A.D. 70. These writings belong to very different types of thought. In B¹ the earthly Jerusalem is to

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be rebuilt, but not so in B^2 ; in the former the exiles are to be restored, but not in the latter; in the former a Messianic kingdom without a Messiah is expected, but no earthly blessedness of any kind in the latter, &c. $B^1 = i.-ix$. 1, xxxii. 2-4, xliii.-xliv. 7, xlv.-xlvi., lxxxii.-lxxxii., lxxxiv., lxxxvi.lxxxvii. $B^2 = ix.-xxv.$, xxx. 2-xxxv., xli.-xlii., xliv. 8-15, xlvii.-lii., lxxv.-lxxvi., lxxxiii. The final editor of the work wrote in the name of Baruch the son of Neriah.

The above critical analyses were attacked and rejected by Clemen (*Stud. und Krit.*, 1898, 211 sqq.). He fails, however, in many cases to recognize the difficulties at issue, and those which cannot be ignored he sets down to the conflicting apocalyptic traditions, on which the author was obliged to draw for his subject-matter. Though Ryssel (Kautzsch, *Apok. u. Pseud. des A. T.* ii. 409) has followed Clemen, neither has given any real explanation of the disorder of the book as it stands at present. Beer (*op. cit.*) agrees that xxxvi.-xl. and liii.-lxx. are of different authorship from the rest of the book and belong to the earlier date.

Relation to 4 Ezra.—The affinities of this book and 4 Ezra are so numerous (see Charles, op. cit. 170-171) that Ewald and Ryle assumed identity of authorship. But their points of divergence are so weighty (see op. cit. pp. lxix.-lxxi.) that this view cannot be sustained. Three courses still remain open. If we assume that both works are composite, we shall perforce admit that some of the constituents of 4 Ezra are older than the latest of Baruch, and that other constituents of Baruch are decidedly older than the remaining ones of 4 Ezra. On the other hand, if we assume unity of authorship, it seems impossible to arrive at finality on the chronological relations of these two works. Langen, Hilgenfeld, Wieseler, Stähelin, Renan, Hausrath, Drummond, Dillmann, Rosenthal, Gunkel, have maintained on various grounds the priority of 4 Ezra; and Schürer, Bissell, Thomson, Deane, Kabisch, De Faye, Wellhausen, and Ryssel the priority of Baruch on grounds no less convincing.

Relation to Rabbinical Literature.—A very close relation subsists between our book and rabbinical literature. Indeed in some instances the parallels are so close that they are almost word for word. The description of the destruction of Jerusalem by angels in vi.-viii. is found also in the Pesikta Rabbati 26 (ed. Friedmann 131a). By means of this passage we are, as Ginzberg has shown, able to correct the corrupt reading "the holy Ephod" (vi. 7), ארון הקודש into "the holy Ark," i.e. ארון הקודש. What might be taken as poetic fancies in our text are recounted as historical facts in rabbinical literature. Thus the words (x. 18):

"And ye priests, take ye the keys of the sanctuary,
And cast them into the height of heaven,
And give them to the Lord and say:
'Guard Thine own house; for lo we are found unfaithful stewards,'"

are given in various accounts of the fall of Jerusalem. (See Ta'anith, 29a; Pesiķt. R., *loc. cit.*; *Yalquṭ Shim'oni* on Is. xxi; *Aboth* of Rabbi Nathan vii.). Even the statement that the bodies of Sennacherib's soldiers were burned while their garments and armour remained unconsumed has its parallel in *Sanh*. 94a.

Integrity of the Book.—In lxxvii. 19 it is said that Baruch wrote two epistles, one to the nine and a half tribes and the other to the two and a half at Babylon. The former is found in lxxviii.-lxxxvi.; the latter is lost, but is probably preserved either wholly or in part in the Book of Baruch, iii. 9-iv. 29 (see Charles, *op. cit.* pp. lxv.-lxvii). On the other hand, it is not necessary to infer from lxxv. that an account of Baruch's assumption was to be looked for in the book.

Authorities.—The literature is fully cited in Schürer, *Gesch.* iii. 223-232, and R. H. Charles, *Apocalypse of Baruch*, pp. xxx.-xliii. Ginzberg's article in the *Jewish Encyclopaedia*, ii. 551-556, is a fresh and valuable contribution.

Rest of the Words of Baruch. This book was undoubtedly written originally by a Jew but was subsequently revised by a Christian, as has been shown by Kohler in the Jewish Quarterly Review (1893), pp. 407-409. It passed under a double name in the Abyssinian Church, where it was known both as "the Rest of the Words of Baruch" and "the Rest of the Words of Jeremiah." Its Greek name is the latter—τὰ παραλειπόμενα Ἱερεμίου προφήτου. It has been preserved in Greek, Ethiopic, Armenian and Slavonic. The Greek was first printed at Venice in 1609, next by Ceriani in 1868 in his Mon. Sacra, v. 11-18; by Harris, The Rest of the Words of Baruch, in 1889; and Bassiliev, Anec. Graeco-Byzantina, i. 308 sqq. (1893). The book begins like the Syriac Apocalypse of Baruch with an account of the removal of the sacred vessels of the Temple before its capture by the Chaldees. Baruch remains in Jerusalem and Jeremiah accompanies the Exiles to Babylon. After 66 years' exile Jeremiah brings back the Jews to Jerusalem, but refuses to admit such as had brought with them heathen wives. Then follows a vision of Jeremiah which is Christian.

Harris regards the book in its present form as an eirenicon addressed to the Jews by a Christian after the rebellion of Bar Cochba (Barcochebas) and written about 136. Though the original work was dependent on the Apocalypse of Baruch it cannot have been written much before the close of the 1st cent. A.D. Its *terminus ad quem* is at present indeterminable.

(R. H. C.)

[1] Toy (*Jewish Enc.* ii. 556) thinks that the "them" in ii. 4, 5 may be a scribal slip and that we have here not the confession of the Palestinian remnant and that of the Exiles, but simply a juxtaposition of two forms of confession.

- [2] In ii. 25 we have the word ἀποστολή with the extraordinary meaning of "plague" as in Jer. xxxix. (xxxii.) 36.
- [3] Ryssel has adopted Charles's restoration of the text in these passages and practically also in xliv. 12. but without acknowledgment.

BARUGO, a town on the north coast of the province of Leyte, island of Leyte, Philippine Islands, on Carigara Bay. Pop. (1903) 12,360. It exports large quantities of hemp and copra, and imports rice, petroleum, and cotton-goods.

BARWANI, a native state of India, in the Bhopawar agency in central India. It lies in the Satpura mountains, south of the Nerbudda. Area, 1178 sq. m.; pop. (1901) 76,136. Many of the inhabitants are Bhils. The chief, whose title is Rana, is a Rajput of the Sisodhyia clan, connected with the Udaipur family. Though the family lost most of its possessions during the Mahratta invasion in the 14th century, it never became tributary to any Malwa chief. The forests are under an English official. The town of Barwani is situated near the left bank of the Nerbudda. The population in 1901 was 6277.

BARYATINSKY, ALEXANDER IVANOVICH, PRINCE (1814-1879), Russian soldier and governor of the Caucasus, was privately educated, entered the school of the ensigns of the Guard in his seventeenth year and, on the 8th of November 1833, received his commission of cornet in the Life Guards of the cesarevich Alexander. In 1835 he served with great gallantry in the Caucasus, and on his return to St Petersburg was rewarded with a gold sword "for valour." On the first of January 1836 he was attached to the suite of Alexander, and in 1845 was again ordered off to the Caucasus and again most brilliantly distinguished himself, especially in the attack on Shamyl's [v.03 p.0456] stronghold, for which he received the order of St George. In 1846 he assisted Fieldmarshal Paskievich to suppress the Cracow rising. From 1848 to 1856 he took a leading part in all the chief military events in the Caucasus, his most notable exploits being his victory at Mezeninsk in 1850 and his operations against Shamyl at Chechen. His energetic and at the same time systematic tactics inaugurated a new era of mountain warfare. On the 6th of January 1853 he was appointed adjutant-general and, on July 5th of the same year, chief of the staff. In 1854 he took part in the brilliant Kürük Dere campaign. On the 1st of January 1856 he became commander-inchief of the Caucasian army, and, subsequently, governor of the Caucasus. As an administrator he showed himself fully worthy of his high reputation. Within three years of his appointment, the whole of the eastern Caucasus was subdued and the long elusive Shamyl was taken captive. Baryatinsky also conquered many of the tribes of the western Caucasus dwelling between the rivers Laba and Byelaya. For these fresh services he was created a fieldmarshal. But his health was now entirely broken by his strenuous labours, and on the 6th of December 1862 he was, at his own request, relieved of his post. He spent the last days of his life abroad and died at Geneva, after forty-eight years of active service.

See A. L. Zisserman, Fieldmarshal Prince A. I. Baryatinski (Russ.) (Moscow, 1888-1891).

BARYE, ANTOINE LOUIS (1796-1875), French sculptor, was born in Paris on the 24th of September 1796. Like many of the sculptors of the Renaissance he began life as a goldsmith. After studying under Bosio, the sculptor, and Gros, the painter, he was in 1818 admitted to the École des Beaux Arts. But it was not till 1823, when he was working for Fauconnier, the goldsmith, that he discovered his real bent from watching the wild beasts in the Jardin des Plantes, making vigorous studies of them in pencil drawings worthy of Delacroix and then modelling them in sculpture on a large or small scale. In 1831 he exhibited his "Tiger devouring a Crocodile," and in 1832 had mastered a style of his own in the "Lion and Snake." Thenceforward Barye, though engaged in a perpetual struggle with want, exhibited year after year these studies of animals-admirable groups which reveal him as inspired by a spirit of true romance and a feeling for the beauty of the antique, as in "Theseus and the Minotaur" (1847), "Lapitha and Centaur" (1848), and numerous minor works now very highly valued. Barye was no less successful in sculpture on a small scale, and excelled in representing animals in their most familiar attitudes. As examples of his larger work we may mention the Lion of the Column of July, of which the plaster model was cast in 1839, various lions and tigers in the gardens of the Tuileries, and the four groups-War, Peace, Strength, and Order (1854). In 1852 he cast his bronze "Jaguar devouring a Hare." The fame he deserved came too late to the sculptor. He was made professor at the museum in 1854, and was elected to the Academy of Fine Arts in 1868. He died on the 25th of June 1875. The mass of admirable work left to us by Barye entitles him to be regarded as the greatest artist of animal life of the French school, and as the creator of a new class of art which has attracted such men as Frémiet, Peter, Cain, and Gardet, who are regarded with justice as his worthiest followers.

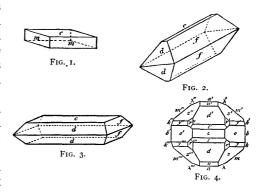
Authorities.—Emile Lamé, Les Sculpteurs d'animaux; M. Barye (Paris, 1856); Gustave Planche, "M. Barye," Revue des deux mondes (July 1851); Théophile Silvestre, Histoires des artistes vivants (Paris, 1856); Arsène Alexandre, "A. L. Barye," Les Artistes célèbres, ed. E. Muntz (Paris, 1889) (with a bibliog.); Charles DeKay, Life and Works of A. L. Barye (1889), published by the Barye Monument Assoc. of New York; Jules Claretie, Peintres et sculpteurs contemporains (1882); Roger Ballu, L'Œuvre de Barye (1890); Charles Sprague Smith, Barbizon Days (1903).

(H. Fr.)

BARYTES, a widely distributed mineral composed of barium sulphate (BaSO₄). Its most striking feature and the one from which it derives its name barytes, barite (from the Greek βαρύς heavy)

or heavy spar, is its weight. Its specific gravity of 4.5 is about twice as great as that of salt and of many other colourless, transparent and glassy minerals not unlike barytes in general appearance. The mineral is usually found in a state of considerable chemical purity, though small amounts of strontium and calcium sulphates may isomorphously replace the barium sulphate: ammonium sulphate is also sometimes present, whilst clay, silica, bituminous matter, &c., may be enclosed as impurities.

Crystals of barytes are orthorhombic and isomorphous with the strontium and lead sulphates (celestite and anglesite); they are usually very perfectly developed and present great variety of form. The simplest are rhomb-shaped tables (fig. 1) bounded by the two faces of the basal pinacoid (c) and the four faces of the prism (m); the angle between the prism-faces (mm) is 78° 23′, whilst that between c and m is 90°. The mineral has a very perfect cleavage parallel to the faces c and m, and the cleavage surfaces are perfectly smooth and bright. The crystals of prismatic habit represented in figs. 2 and 3 are bounded by the domes d and f and the basal pinacoid c; fig. 4 is a plan of a still more complex crystal. Twinning is represented only by twin-lamellae,



which are parallel to the planes m and f and are of secondary origin, having been produced by pressure.

Crystals of barytes may be transparent and colourless, or white and opaque, or of a yellow, brown, bluish or greenish colour. Well developed crystals are extremely common, but the mineral occurs also in a granular, earthy, or stalactitic condition. It is known as cawk in the Derbyshire lead mines. The "crested" or "cock's comb" barytes occurs as rounded aggregations of thin lamellar crystals.

Barytes is of common occurrence in metalliferous veins, especially those which yield ores of lead and silver; some of the largest and most perfect crystals of colourless barytes were obtained from the lead mines near Dufton in Westmorland. It is found also in beds of iron ore, and the haematite mines of the Cleator Moor district in west Cumberland have yielded many extremely fine crystals, specimens of which may be seen in all mineral collections. In the neighbourhood of Nottingham, and other places in the Midlands, barytes forms a cementing material in the Triassic sandstones; amber-coloured crystals of the same mineral are found in the fuller's earth at Nutfield in Surrey; and the septarian nodules in London Clay contain crystals of barytes as well as of calcite. Crystals are found as a rarity in the amygdaloidal cavities of igneous rocks.

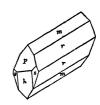
Artificially prepared crystals of barytes may be obtained by allowing a solution of a soluble barium salt to diffuse slowly into a solution of a soluble sulphate. Barium chloride is present in some natural waters, and when this is the case the interaction of sulphates results in a deposition of barytes, as has occurred in the pipes and water-boxes of the Newcastle-on-Tyne coal mines.

Commercially, barytes is used in the preparation of barium compounds, as a body for certain kinds of paper and cloth, and as a white pigment ("permanent white"). The finely powdered and washed mineral is too crystalline and consequently of insufficient opacity to be used alone as a paint, and is therefore mixed with "white lead," of which material it is also used as an adulterant.

(L. J. S.)

[v.03 p.0457]

BARYTOCALCITE, a rare mineral found only at Alston Moor in Cumberland, where it occurs as diverging groups of white transparent crystals lining cavities in the Mountain Limestone. The crystals belong to the monoclinic system and are usually prismatic or blade-shaped in habit. The hardness is 4, and the sp. gr. 3.65. There are perfect cleavages parallel to the prism faces inclined at an angle of 73° 6′, and a less perfect cleavage parallel to the basal plane, the angle between which and the prism faces is 77° 6′; the angles between these three cleavages thus approximate to the angles (74° 55′) between the three cleavages



of calcite, and there are other points of superficial resemblance between these two minerals. Chemically, barytocalcite is a double salt of barium and calcium carbonates, $BaCa(CO_3)_2$, thus differing from the orthorhombic bromlite (q.v.) which is an isomorphous mixture of the two carbonates.

(L. J. S.)

BARYTONE, or Baritone (Ital. *baritono*, from Gr. $\beta\alpha\rho\acute{\nu}\tau$ ovo ς , deep sounding), a musical term for the male voice whose range lies between those of the tenor and of the bass—a high bass rather than a low tenor; also the name of an obsolete stringed instrument like the viola da Gamba, and of the small $B\flat$ or C saxhorn.

BASALT, in petrology, one of the oldest rock names, supposed to be derived from an Ethiopian word *basal*, signifying a stone which yields iron; according to Pliny, the first basalts were obtained in Ethiopia. In current usage the term includes a large variety of types of igneous rock belonging to the basic subdivision, dark in colour weathering to brown, and comparatively rich in magnesia and iron. Some basalts are in large measure glassy (tachylites), and many are very fine grained and compact; but it is more usual for them to exhibit porphyritic structure, showing

larger crystals of olivine, augite or felspar in a finely crystalline groundmass. Olivine and augite are the commonest porphyritic minerals in basalts, the former green or yellowish (and weathering to green or brown serpentine), the latter pitch-black. Porphyritic plagioclase felspars, however, are also very common, and may be one or two inches in length, though usually not exceeding a quarter of an inch; when fresh they are dark grey with smooth lustrous cleavage surfaces; when decomposed they become turbid, and assume grey or greenish shades. Basaltic lavas are frequently spongy or pumiceous, especially near their surfaces; and, in course of time, the steam cavities become filled with secondary minerals such as calcite, chlorite and zeolites. Another characteristic of this group of rocks is the perfection with which many of them show prismatic or columnar jointing, a structure often called "basaltic jointing."

The minerals of basaltic rocks have a fairly uniform character throughout the whole group. In microscopic section the olivine is pale green or colourless, and is very frequently more or less altered to serpentine. The secondary mineral begins to form upon the surfaces and along the cracks of the olivine, gradually producing a mesh-work in the interstices of which small kernels of olivine remain; and when the process is completed the mesh structure persists in the resulting pseudomorph, giving a clear indication as to its history. The augite is mostly brown, often with a purplish tinge, hardly at all dichroic, but frequently showing zonal or hour-glass structure, and various types of twinning. It weathers to chlorite, uralite, calcite, &c. The plagioclase felspar, if fresh, is transparent and appears simple in ordinary light, but when polarized breaks up into a series of bars of different colours owing to its complex twinned structure. Practically all varieties of this mineral from anorthite to albite are known to occur in basalt, but by far the commonest species are bytownite and labradorite. Weathering destroys the limpid character of the fresh mineral, producing turbid pseudomorphs containing epidote, calcite, white micas, kaolin, &c. When these minerals occur as phenocrysts their crystalline outlines may be very perfect (though, especially in the olivine, corrosion and partial resorption may give rise to rounded or irregular forms).

In the groundmass, or second generation of crystal, not only are the ingredients smaller, but their crystals are less perfect; yet in many basalts small lath-shaped felspars and minute prisms of augite, densely crowded together, form the matrix. With these there may be a greater or less amount of brown, isotropic glass. Olivine rarely occurs as an ingredient of the groundmass. In the vitreous basalts sometimes very few crystallized minerals are observable; the greater part of the rock is a dark brown glassy material, almost opaque even in the thinnest sections, and generally charged with black grains of magnetite, skeleton crystals of augite or felspar, spherulites, perlitic cracks, or steam vesicles. In other basaltic rocks no glassy material appears, but the whole mass is thoroughly crystallized; rocks of this nature are generally known to British petrologists as dolerites (q.v.). Till recent years it was widely believed by continental geologists that the pre-Tertiary basalts differed so fundamentally from their Tertiary and recent representatives that they were entitled to be regarded as a distinct class. For the older rocks the names anamesite, diabase porphyrite, diabas-mandel-stein, or melaphyre were used, and are still favoured by many writers, to indicate varieties and states of more or less altered basalts and dolerites, though no longer held to differ in any essential respects from the better preserved basalts. Still older is the term trap, which is derived from a Swedish word meaning "a stair," for in many places superposed sheets of basalt weather with well-marked step-like or terraced features. This designation is still used as a general term for the whole suite of basaltic rocks by many geologists and travellers (e.g. trap-dikes, the "traps" of the Deccan).

In the early years of the 19th century a great controversy convulsed the geological world as to the origin of the older basalts or "floetz-traps." Werner, the Saxon mineralogist, and his school held them to be of aqueous origin, the chemical precipitates deposited in primeval seas, but Hutton and a number of French geologists maintained that they were really volcanic rocks emitted by craters now extinct (see Geology: *Historical*).

Of the less common minerals of basalt, a few may be mentioned. Black hornblende, dark brown in thin sections, and often corroded, is not uncommon, especially in intrusive basalts. Hypersthene occurs also, usually replacing olivine. Black mica (biotite) is not infrequently to be seen. Sapphire, garnet and zircon are rare. Minerals of the felspathoid group occur in a large number of basaltic rocks; nepheline and leucite are the most common, but hauyne is occasionally present. If nepheline entirely replaces felspar, the rock is known as nepheline-basalt; if the replacement is only partial the term nepheline-basanite is used. Similarly there are leucite-basalts and leucitebasanites. The nepheline is in small six-sized prisms, and usually cannot be detected with the unaided eye. Even with the help of the microscope nepheline basalts are not always easy to determine, as the crystals may be exceedingly small and imperfect, and they readily decompose into analcite and zeolites. In some cases only the presence of an anisotropic substance, with weak double refraction and readily attacked by acids (the so-called "nephelinitoid"), can be made out. This substance may be imperfectly crystallized nepheline, or a peculiar glass which is rich in soda. Most nepheline basalts are fine grained, very dark coloured rocks, and belong to the Tertiary period. They are fairly common in some parts of Germany and occur also in Tripoli, Asia Minor, Montana, Cape Verde Islands, &c. Leucite-basalts contain small rounded crystals of leucite in place of plagioclase felspar. Rocks of this group are well known in the Eifel, and other volcanic districts in Germany, also in Bohemia, Italy, Java, Montana, Celebes, &c. The minerals haüyne, nosean, sodalite and melilite tend to occur with some frequency in nepheline and leucitebasalts, though rare in ordinary basalts. Melilite, a lime-alumina-silicate, is characteristic of certain very basic rocks, the melilite-basalts. It is pale yellow or colourless in thin sections, and yields peculiar and characteristic dark blue polarization colours. This rare group of rocks is

known to occur in Bohemia, Swabia and South Africa. Perofskite, in small dark brown cubic crystals, is a constant accessory in these rocks. The augite is usually violet coloured, and shows zonal and hour-glass structures. Green augite may occur in the nepheline-basalts, and aegerine (soda-iron-augite) is occasionally found in them.

[v.03 p.0458]

The distribution of basalts is world-wide; and in some places they occur in immense masses, and cover great areas. In Washington, Oregon, and Idaho many thousands of square miles are occupied by basaltic-lava flows. In the Sandwich Islands and Iceland they are the prevalent lavas; and the well-known columnar jointed basalts of Skye, Staffa, and Antrim (Giant's Causeway) form a southward extension of the Icelandic volcanic province, with which they are connected by the similar rocks of the Faeroe Islands. In the Deccan in India great basaltic lava fields are known; and Etna and Vesuvius emit basaltic rocks. In older geological periods they were not less common; for example, in the Carboniferous in Scotland.

(J. S. F.)

BASCOM, JOHN (1827-), American educationalist and philosophical writer, was born at Genoa, New York, on the 1st of May 1827. He graduated at Williams College in 1849 and at the Andover Theological Seminary in 1855, was professor of rhetoric at Williams College from 1855 to 1874, and was president of the University of Wisconsin and professor of mental and moral philosophy there from 1874 to 1887. In 1887-1891 and in 1901-1903 he was lecturer in sociology, and in 1891-1901 professor of economics in Williams College. He retired in 1903. Among his publications may be mentioned: Aesthetics (1862); Philosophy of Rhetoric (1865); Science, Philosophy and Religion (1871); Philosophy of English Literature (1874); Philosophy of Religions (1876); Problems in Philosophy (1885); The New Theology (1891); Social Theory (1895); Evolution and Religion (1896); Growth of Nationality in the United States (1899); and God and His Goodness (1901).

BASE. (1) (Fr. bas, Late Lat. bassus, low; cf. Gr. $\beta\alpha\theta\dot{o}\varsigma$) an adjective meaning low or deep, and so mean, worthless, or wicked. This sense of the word has sometimes affected the next, which is really distinct. (2) (Gr. βάσις, strictly "stepping," and so a foundation or pedestal) a term for a foundation or starting point, used in various senses; in sports, e.g. hockey and baseball; in geometry, the line or face on which a figure or solid stands; in crystallography, e.g. "basal plane"; in surveying, in the "base line," an accurately measured distance between the points from which the survey is conducted; in heraldry, in the phrase "in base," applied to any figure or emblem placed in the lowest part of a shield.

In chemistry the term denotes a substance which combines with an acid to form a salt. In inorganic chemistry such compounds are almost invariably oxides or hydroxides, and water in eliminated during the combination; but in organic chemistry many compounds exist, especially ammonia derivatives, which directly combine with acids. Chemical bases are consequently antithetical to acids; and an acid is neutralized by a base with the production of a salt. They reverse certain colour reactions of acids, *e.g.* turn red litmus blue; this is termed an "alkaline reaction."

In architecture the "base" is the lowest member of a column or shaft. In Egyptian and Greek architecture it is the raised slab in stone or cement on which the primitive timber column was placed, to keep it dry. Afterwards it was always reproduced in Egypt, even although the column, being in stone, no longer required it; a custom probably retained because, being of a much larger circumference than the lower part of the column, it gave increased stability. In Assyrian architecture, where it served to carry wooden posts or columns, it took the form of a large torus moulding with enrichments. In Persian architecture the base was much higher than in any other style, and was elaborately carved. In primitive Greek work the base consisted of the stone plinth as found in Crete and Tiryns, and of three small steps at Mycenae. In archaic Greek work it has already disappeared in the Doric order, but in the Ionic and Corinthian orders it is more or less richly moulded, the most elaborate examples being those found in the temple of Apollo at Branchidae in Milesia. For the contour of the mouldings see Orders. The Roman orders all have the favourite design known as the Attic base. Romanesque bases were rude but vigorous copies of the old classic base, and were often decorated with projections or spurs (Fr. griffes) at the angles of the square dies, thus connecting them with the square base. In the Early English style, these spurs followed the conventional design of the period, and about the same time the mouldings were deeply sunk and occasionally cut downwards, so that they would have held water if used externally. Later, the base becomes less bold in treatment, but much more complex in its contours, and in the 15th century is given an unusual height with two stages, the lower one constituting a kind of plinth, which is sometimes known as the ground table, or the base course.

A Base Court (Fr. *basse cour*, *i.e.* the lower court), is the first open space within the gates of a castle. It was used for exercising cavalry, and keeping live stock during a siege. (See Enceinte).

The Base of a Wall or Ground Table, in architecture, is the mouldings round a building just above ground; they mostly consist of similar members to those above described and run round the buttresses. The flat band between the plinth and upper mouldings is frequently panelled and carved with shields, as in Henry VII. Chapel at Westminster.

BASE-BALL (so-called from the bases and ball used), the national summer sport of the United States, popular also throughout Canada and in Japan. Its origin is obscure. According to some authorities it is derived from the old English game of rounders (q.v.), several variations of which were played in America during the colonial period; according to other authorities, its

probably at Cooperstown, New York, in 1839, when it is said, Abner Doubleday (later a general in the U.S. army) devised a scheme for playing it. About the beginning of the 19th century a game generally known as "One Old Cat" became popular with schoolboys in the North Atlantic states; this game was played by three boys, each fielding and batting in turn, a run being scored by the batsman running to a single base and back without being put out. Two Old Cat, Three Old Cat, and Four Old Cat were modifications of this game, having respectively four, six, and eight players. A development of this game bore the name of town-ball and the Olympic Town-Ball Club of Philadelphia was organized in 1833. Matches between organized base-ball clubs were first played in the neighbourhood of New York, where the Washington Baseball Club was founded in 1843. The first regular code of rules was drawn up in 1845 by the Knickerbocker Baseball Club and used in its matches with the Gotham Eagle and Empire clubs of New York, and the Excelsior, Putnam, Atlantic and Eckford clubs of Brooklyn. In 1858 the first National Association was organized, and, while its few simple laws were generally similar to the corresponding rules of the present code, the ball was larger and "livelier," and the pitcher was compelled to deliver it with a full toss, no approach to a throw being allowed. The popularity of the game spread rapidly, resulting in the organization of many famous clubs, such as the Beacon and Lowell of Boston, the Red Stockings of Cincinnati, the Forest City of Cleveland and the Maple Leaf of Guelph, but owing to the sharp rivalry between the foremost teams, semi-professionalism soon crept in, although in those days a man who played for a financial consideration always had some other means of livelihood, as the income to be derived from playing ball in the summer time was not enough to support him throughout the year. In spite of its popularity, the game acquired certain undesirable adjuncts. The betting and pool selling evils became prominent, and before long the game was in thorough disrepute. It was not only generally believed that the matches were not played on their merits, but it was known that players themselves were not above selling contests. At that time many of the journals of the day foretold the speedy downfall of the sport. A convention of those interested financially and otherwise in the game, was held in 1867 in Philadelphia, and an effort was made to effect a reformation. That the sport even then was by no means insignificant can be seen from the fact that in that convention some 500 organizations were represented. While the work done at the convention did not accomplish all that was expected, it did produce certain reforms, and the sport grew rapidly thereafter both in the eastern and in the middle western part of the United States. In the next five years the interest in the game became so great that it was decided to send a representation of American base-ball players to England; and two clubs, the Bostons, who were the champions that year, and the Athletics, former champions, crossed the Atlantic and played several exhibition games with each other. While successful in exciting some interest, the trip did not succeed in popularizing baseball in Great Britain. Fifteen years later two other nines of representative American base-ball players made a general tour of Australia and various other countries, completing their trip by a contest in England. This too, however, had little effect, and later attempts to establish base-ball in England have likewise been unsuccessful. But in America the game continued to prosper. The first entirely professional club was the Cincinnati Red Stockings (1868). Two national associations were formed in 1871, one having jurisdiction over professional clubs and the other over amateurs. In 1876 was formed the National League, of eight clubs under the presidency of Nicholas E. Young, which contained the expert ball-players of the country. There were so many people in the United States who wanted to see professional base-ball that this organization proved too small to furnish the desired number of games, and hence in 1882 the American Association was formed. For a time it seemed that there would be room for both organizations; but there was considerable rivalry, and it was not until an agreement was made between the two organizations that they were able to work together in harmony. They practically controlled professional base-ball for many years, although there were occasional attempts to overthrow their authority, the most notable being the formation in 1890 of a brotherhood of players called the Players' League, organized for the purpose of securing some of the financial benefits accruing to the managers, as well as for the purpose of abolishing black-listing and other supposed abuses. The Players' League proved not sufficiently strong for the task, and fell to pieces. For some years the National League consisted of twelve clubs organized as stock companies, representing cities as far apart as Boston and St Louis, but in 1900 the number was reduced to eight, namely, Boston, Brooklyn, Chicago, Cincinnati, New York, Pittsburg, Philadelphia and St Louis. Certain aggressive and dissatisfied elements took advantage of this change to organize a second great professional association under the presidency of B. B. Johnson, the "American League," of eight clubs, six of them in cities where the National League was already represented. Most of the clubs of both leagues flourish financially, as also do the many minor associations which control the clubs of the different sections of the country, among which are the Eastern League, the American Association, Western League, Southern Association, New

resemblance to rounders is merely a coincidence, and it had its origin in the United States,

Amateur base-ball, in its organized phase, is played mostly by school and university clubs as well as those of athletic associations. The first college league was formed in 1879 and comprised Harvard, Princeton, Amherst, Brown and Dartmouth, Yale joining a year later. The Eastern College League, with Columbia, Harvard, Princeton and Yale, followed in 1887. This was afterwards dissolved and at present the most important universities of the eastern states are members of no league, although such organizations exist in New England and different parts of

Henry Chadwick (d. 1908) is the best known.

England League, Pacific League and the different state leagues. Professional base-ball has not been free from certain objectionable elements, of which the unnecessary and rowdyish fault-finding with the umpires has been the most evident, but the authorities of the different leagues have lately succeeded, by strenuous legislation, in abating these. Of authorities on base-ball,

[v.03 p.0459]

the west and south. Amateur base-ball has progressed along the same lines as professional, although the college playing rules formerly differed in certain minor points from those of the professional leagues.

The following is a general description of the field and of the manner in which the game is played, but as the game has become highly complicated, situations may arise in playing in which general statements do not strictly hold. Any smooth, level field about 150 yds. long and 100 yds. broad will serve for a base-ball ground. Upon this field is marked out with white chalk a square, commonly called the diamond, smooth, like a cricket pitch, the sides of which measure 30 yds. each, and the nearest corner of which is distant about 30 yds. from the limit of the field. This corner is marked with a white plate, called the home-base or plate, five-sided in shape, two of the sides being 1 ft. long and that towards the pitcher 17 in. At the other three corners and attached to pegs are white canvas bags 15 in. square filled with some soft material, and called, beginning at the right as one looks towards the field, first-base, second-base and third-base respectively. The lines from home-base to first, and from home to third are indefinitely prolonged and called foul-lines. The game is played by two sides of nine men each, one of these taking its turn at the bat while the other is in the field endeavouring, as provided by certain rules, to put out the side at bat. Each side has nine turns, or innings, at bat, unless the side last at bat does not need its ninth innings in order to win; a tie at the end of the ninth innings makes additional innings necessary. A full game usually takes from 1½ to 2 hrs. to play. Three batsmen are put out in each innings, and the side scoring the greatest number of runs (complete encircling of the bases without being put out) wins. A runner who is not put out but fails to reach home-base does not score a run, but is "left on base."

Implements of the Game.—The ball, which is $9-9\frac{1}{4}$ in. in circumference and weighs $5-5\frac{1}{4}$ oz., is made of yarn wound upon a small core of vulcanized rubber and covered with white leather, which may not be intentionally discoloured. The bat must be round, not over $2\frac{3}{4}$ in. in diameter at the thickest part, nor more than 42 in. in length. It is usually made of ash or some other hard wood, and the handle may be wound with twine. Three-cornered spikes are usually worn on the players' shoes. The catcher and first-baseman (v.infra) may wear a glove of any size on one hand; the gloves worn by all other players may not measure more than 14 in. round the palm nor weigh more than 10 oz.

The Players.—The fielding side consists of (a) the pitcher and catcher, called the battery, (b) the first-baseman, second-baseman, third-baseman and short-stop, called infielders, and (c) the left-fielder, centre-fielder and right-fielder, called out-fielders.

The pitcher, who delivers the ball to the batsman, is the most important member of the side. In the act of pitching, which is throwing either over or underhand, he must keep one foot in contact with a white plate, called the pitcher's plate, 24 in. long and 6 in. wide, placed 60.5 ft. from the back of the home-base. Before 1875 the pitcher was obliged to deliver the ball with a full toss only, but about that time a disguised underhand throw, which greatly increased the pace, began to be used so generally that it was soon legalized, and the overhand throw followed as a matter of course. As long as the arm was held stiff no curve could be imparted to the flight of the ball in the air, but with the increase of pace came the possibility of doing this by a movement of the wrist as the ball left the hand, the twist thus given causing the ball, by the pressure on the air, to swerve to one side or the other, or downwards, according to the position of the hand and fingers as the ball is let go. The commonest of these swerving deliveries, and the first one invented, is the outcurve, the ball coming straight towards the batsman until almost within reach of his bat, when it suddenly swerves away from him towards the right, if he be right-handed. The other important curves are the incurve, shooting sharply to the left, and the drop, with their many variations, nearly every pitcher using some favourite curve. Change of pace, disguised as well as possible, is also an important part of pitching strategy, as well as variation of the delivery and the play upon the known weaknesses or idiosyncrasies of the batsman. Good control over the ball is a necessity, as four "balls" called by the umpire,—that is, balls not over the base, or over the base and not between the shoulder and knee of the batsman,-entitle the batsman to become a base-runner and take his first base. If the pitcher disregards the restrictions placed upon him by the rules (e.g. he may not, while in position, make a motion to deliver the ball to the batsman without actually delivering it, or to first-base, while that base is occupied by a runner, without completing the throw), he is said to have made a balk, which permits a base runner to advance a base. In fielding batted balls the pitcher takes all that come directly to him, especially slow ones which the other fielders cannot reach in time. One of his duties is to "back up" the first-baseman in order to stop balls thrown wide, and to cover first-base in place of the baseman whenever that player has to leave his base to field a ground ball. On occasion he also backs up other positions.

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The *catcher* usually stands about 1 yd. behind the home plate, and he must never be more than 10 ft. behind the home plate when the pitcher delivers the ball to the batsman. He generally catches the ball from the pitcher before it strikes the ground, and, when a man of the opposing side has succeeded in getting to a base, must be on the alert to head this opponent off should he endeavour to *steal* the next base, *i.e.* run to it while the pitcher is delivering the ball to the batsman. For this reason the catcher must be a quick, strong and accurate thrower. As the catcher alone faces the whole field, he is able to warn the pitcher when to throw to a base in order to catch a runner *napping* off the base, and by secretly signalling to the pitcher (usually by means of signs with his fingers) he directs what kind of a ball is to be pitched, so that he may be in the proper position to receive the ball, be it high or low, to left or right. Some pitchers, however, prefer to reserve their choice of balls and therefore do the signalling themselves. The

catcher wears a mask, a breast-pad, and a large glove, without which the position would be a very dangerous one.

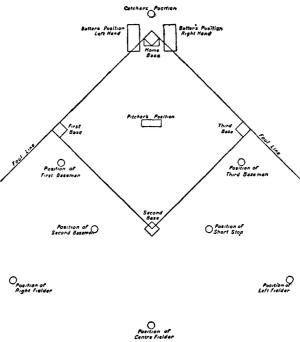


Diagram of Base-ball Field.

As every batsman upon hitting the ball must run for the first-base, the first-baseman must be a sure catch of balls thrown to head runners off, even those thrown too low, high or wide. A tall man is usually chosen for this position. The second-baseman usually stands about 30 ft. to the right of second-base and back of the line between the bases, and attends to balls batted to his side of the diamond. He also backs up any exposed position and must be ready to cover secondbase whenever a runner tries to steal down from first-base, or whenever there is a runner on second-base, a duty which he shares with the short-stop, whose position corresponds to that of the second-baseman on the left side of the diamond. Short-stop must be a quick and accurate thrower and a lively fielder, as he is required to back up second- and third-base. Both he and the second-baseman must field ground balls cleanly and are often called upon to catch fly balls also. The requirements of third-baseman are very similar, but he must be an exceptionally good thrower, as he has the longest distance to throw to the first-base; and as he plays nearer to the batsman than do the second-baseman and the short-stop, the balls batted in his direction are apt to be faster and more difficult to field. One of the third-baseman's chief duties is to be ready to run in towards the batsman to field "bunts," i.e. balls blocked by allowing them to rebound from a loosely held bat. These commonly roll slowly in the direction of third-baseman, who, in order to get them to first-base in time to put the runner out, must run in, pick them up, usually with one hand, so as to be in position to throw without the loss of an instant, and "snap" them to the firstbaseman, i.e. throw them underhand without taking time to raise his body to an erect position. Many of these bunts can be fielded either by the pitcher or, if they drop dead in front of the home-plate, by the catcher. The positions of the three outfielders can be seen on the diagram. Their duties consist of catching all "flies" batted over the heads of the infielders (i.e. high batted balls that have not touched the ground), stopping and returning ground balls that pass the infield, and backing up the baseman. The accompanying diagram indicates the territory roughly allotted to the different fielders. "Backing up" is a very prominent feature in fielding. Even the pitcher, for example, should run behind the first-baseman when the ball is thrown to the latter by another, in order to stop a widely thrown or missed ball, which, if allowed to pass, would enable the runner to gain one or more additional bases. Bases vacated by their basemen while fielding balls must often, also, be promptly covered by another player. The general rule of defence strategy is similar to that in cricket, namely, to have as many men as possible at the probable point of attack. There is usually an infield and an outfield captain for the special purpose of calling the name of the player who is to take a certain fly ball, to prevent collisions.

The batsman stands three-quarters facing the pitcher within a parallelogram ("box") 6 ft. long and 4 ft. wide, the lines of which he may not overstep, on penalty of being declared out. His object is to get to first-base without being put out. This he may do in several ways. (1) He may make a "safe-hit," *i.e.* one that is "fair" but cannot be caught, or fielded in time to put him out. (2) He is entitled to first-base if the pitcher pitches four bad balls, at none of which he (the batsman) has struck. (3) He may be unavoidably struck by a pitched ball, in which case he is given his base. (4) He may, except in certain specified cases, after a third strike, if the catcher has failed to catch the third one, earn his base if he can reach it before the catcher can throw the ball to the first-baseman, and the first-baseman, with the ball in his possession, touch first-base. (5) He may reach his base by an error of some fielder, which may be either a muffed fly, a failure to stop and field a ground ball, a muffed thrown ball or a bad throw. Only balls batted within the foul-lines (see diagram) are fair. All others are "fouls," and the batsman cannot run on them. All foul-struck balls are called strikes until two strikes have been called by the umpire, after which fouls are not

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Batting, as in cricket, is a science by itself, although comparatively more stress is laid on fielding than in cricket. A good batsman can place the ball in any part of the field he chooses by meeting the ball at different angles. He may make a safe hit either by hitting the ball on the ground directly through the infield out of reach of the fielders, or so hard that it cannot be stopped. In the last case a failure to stop and field it does not count as an "error" (misplay) for the fielder, even though it came straight at him, the decision as to errors appearing in the score (v. infra) depending upon the official scorer of the home club. The batsman may also hit safely by placing the ball over the heads of the infielders, but not far enough to be caught by the outfielders, or over the heads of the outfielders themselves, or he may bunt successfully. A hit by which two bases can be made (without errors by opponents) is a "two-base-hit," one for three bases a "threebase-hit," and one for four bases a "home-run." The batsman may be put out in various ways. For example, he is out (1) if he fails to bat in the order named in the published batting-list; (2) if he fails to take his position within one minute after the umpire has summoned him; (3) if he makes a foul hit which is caught before it strikes the ground (a ball barely ticked by the bat ["foul-tip"] does not count); (4) if he oversteps the batting-lines; (5) if he intentionally obstructs or interferes with the catcher; (6) if he unsuccessfully attempts the third strike and the ball hits his person or is caught by the catcher (under certain conditions he is out whether the ball is so caught or not), or, not being caught, is thrown to first-base and held there by an opposing player before the batsman can get there; (7) if a fair ball be caught before striking the ground; (8) if any fair ball is fielded to first-baseman before he reaches the base. The batsman becomes a base-runner the moment he starts for first-base. He may, when he first reaches first-base, overrun his base (provided he turns to his right in returning to it) without risk of being put out, but thereafter can be put out by being touched with the ball in the hands of a fielder unless some part of the runner's person is in contact with the base. When a fair or foul ball struck by a batsman on his side is caught on the fly, he must retouch his base, or be put out if the baseman receives the ball before he can do so. A runner on first-base is forced to run to second as soon as a fair ball is batted, or, being on second with another runner on first, he is forced to run to third. This is called being "forced off his base." In such a situation the forced runner can be put out if the ball is thrown to the baseman at the next base before the runner gets there. He does not require to be touched with the ball. The runner on first is entitled, however, to advance to second without risk of being put out if the batsman becomes similarly entitled to first-base (e.g. on being unavoidably struck by the ball, or on four balls). Frequently, if the ball is batted to the infield while a runner is on first-base, the fielder tosses it to second-baseman, putting out the runner, and the secondbaseman has still time to throw the ball to first-base ahead of the batsman, thus completing a "double play." Triple plays are sometimes made when there are runners on two or on all of the bases. Base-running is one of the important arts of base-ball play. A good base-runner takes as long a lead off the base as he dares, starts to run the moment the pitcher makes the first movement to deliver the ball, and if necessary throws himself with a slide, either feet or head first, on to the objective base, the reason for the slide being to make it more difficult for the baseman to touch the runner, having to stoop in order to do so, thus losing time. A base-runner is out if he interferes with an opponent while the latter is fielding a ball or if he is hit by a batted ball. An example of modern base-running is offered by the "double steal," carried out, e.g., when there is a runner on first-base and a runner on third-base. The runner on first starts for second leisurely in order to draw a throw to second by the catcher. If the catcher throws, the runner on third runs for the home-plate, the second-baseman returning the ball to the catcher in order to put the runner out. The play often results in a score, but the runner is frequently caught if the throws are quick and accurate, or when the catcher deceives the runner by throwing, not to the player at second-base, but to a man stationed for the purpose much nearer the home-plate, this man intercepting the ball and returning it to the catcher if the runner on third is attempting to score, or letting it pass to the player on second-base, if the runner on third does not make the attempt.

Team batting is the co-operation of batsman and base-runner. The commonest example is the "hit and run" play, e.q. when a runner is on first-base. After the runner has ascertained by a false start which infielder, whether second-baseman or short-stop, will cover second-base, the batsman signals to the runner that he will hit the next ball. As soon as the pitcher delivers the ball the runner starts for second and the batsman hits the ball to that part of the infield vacated by the fielder who has gone to receive the ball at second from the catcher. If successful this play results in a safe hit, while the runner not infrequently makes, not only second, but third-base as well. Another instance of team batting is when a runner is on third-base and the batsman signals that he will hit the next ball. This enables the runner to get a long start, making his scoring nearly certain if the batsman succeeds in hitting the ball fairly. If the ball is hit without the signal and consequent long start by the runner, the latter is frequently put out at the plate, as the infielder who fields the ball will ignore the batsman and throw the ball to the catcher to head off the runner and prevent a run being scored. In close games the "sacrifice-hit," a part of team batting, is an important element. It consists, when a runner is on base, of a hit by the batsman resulting in his own retirement but the advancement to the next base of the runner. The sacrifice-hit is most frequently a bunt, as this gives the batsman the best chance of reaching first-base safely, besides surely advancing the runner. Another kind of sacrifice-hit is a long fly to the outfield. On such a hit a runner on third-base (as on the other bases) must remain on the base until after the ball is caught, but the distance from the outfield to the home-plate is so great that a fast runner can generally beat the ball and score his run. When men are on bases, coaches are allowed to stand near first and third bases to direct the runners.

One umpire, who has absolute jurisdiction over all points of play, usually officiates in base-ball, but, in important games, two umpires are often employed, one of them standing behind the catcher and calling the good and bad balls pitched, and the other, posted in the infield, giving decisions on plays at the bases.

In cases where the game is tied after nine innings, extra ones are played, the umpire "calling" a game when it becomes too dark to play. In case of rain, play is suspended by the umpire, who calls the game if the rain continues for one half-hour. Should play be permanently interrupted the game counts if five innings have been completed by each side.

Scoring.—The base-ball score shows, in vertical columns, (1) how many times each player has been at bat (bases taken on balls and sacrifice-hits not counted); (2) how many runs he has scored; (3) how many base-hits he has made; (4) how many sacrifice-hits he has made; (5) how many opponents he has put out; (6) how many "assists," *i.e.* times he has assisted in putting out (e.g. stopping a ground ball and throwing it to first-base); (7) the number of errors he has made, wild pitches and "passed balls," *i.e.* not held by the catcher, as well as balks and bases on balls, not being counted as errors but set down under the regular columns, together with the record of stolen bases, extra long hits, double and triple plays, batsmen struck out by each pitcher, the number of men struck by each pitcher with the ball, the time of the game and the name of the umpire.

Careful record is kept of the batting, fielding, pitching and base-running averages of both professional and amateur players. To find the batting record of a player, divide the number of hits made by the number of times at bat. To find a fielding record, divide the number of accepted chances by the total chances, *e.g.* A.B. put 1188 men out, and assisted sixty-four times, while making fifteen errors; his fielding average is therefore 1252 divided by 1267, or 988, 1000 being perfect fielding.

See *Spalding's Base-ball Guide*, in Spalding's Athletic Library, published annually; *How to Play Base-ball*, by T. H. Murnane, Spalding's Athletic Library; *The Book of School and College Sports*, by R. H. Barbour (New York, 1904).

(E. B.)

[v.03 p.0462]

BASEDOW, JOHANN BERNHARD (1723-1790), German educational reformer, was born at Hamburg on the 11th of September 1723, the son of a hairdresser. He was educated at the Johanneum in that town, where he came under the influence of the rationalist H. S. Reimarus (1694-1768), author of the famous Wolfenbütteler Fragmente, published by Lessing. In 1744 he went to Leipzig as a student of theology, but gave himself up entirely to the study of philosophy. This at first induced sceptical notions; a more profound examination of the sacred writings, and of all that relates to them, brought him back to the Christian faith, but, in his retirement, he formed his belief after his own ideas, and it was far from orthodox. He returned to Hamburg, and between 1749 and 1753 was private tutor in a nobleman's family in Holstein. Basedow now began to exhibit his really remarkable powers as an educator of the young, and acquired so much distinction that, in 1753, he was chosen professor of moral philosophy and belles-lettres in the academy of Sorö in Denmark. On account of his theological opinions he was in 1761 removed from this post and transferred to Altona, where some of his published works brought him into great disfavour with the orthodox clergy. He was forbidden to give further instruction, but did not lose his salary; and, towards the end of 1767, he abandoned theology to devote himself with the same ardour to education, of which he conceived the project of a general reform in Germany. In 1768 appeared his Vorstellung an Menschenfreunde für Schulen, nebst dem Plan eines Elementarbuches der menschlichen Erkenntnisse, which was strongly influenced by Rousseau's Émile. He proposed the reform of schools and of the common methods of instruction, and the establishment of an institute for qualifying teachers,—soliciting subscriptions for the printing of his *Elementarwerk*, where his principles were to be explained at length, and illustrated by plates. The subscriptions for this object amounted to 15,000 Talers (£2250), and in 1774 he was able to publish the work in four volumes. It contains a complete system of primary education, intended to develop the intelligence of the pupils and to bring them, so far as possible, into contact with realities, not with mere words. The work was received with great favour, and Basedow obtained means to establish an institute for education at Dessau, and to apply his principles in training disciples, who might spread them over all Germany. The name of Philanthropin which he gave to the institution appeared to him the most expressive of his views; and he engaged in the new project with all his accustomed ardour. But he had few scholars, and the success by no means answered his hopes. Nevertheless, so well had his ideas been received that similar institutions sprang up all over the land, and the most prominent writers and thinkers openly advocated the plan. Basedow, unfortunately, was little calculated by nature or habit to succeed in an employment which required the greatest regularity, patience and attention; his temper was intractable, and his management was one long quarrel with his colleagues. He resigned his directorship of the institution in 1778, and it was finally closed in 1793. Basedow died at Magdeburg on the 25th of July 1790.

See H. Rathmann, *Beiträge zur Lebensgeschichte Basedows* (Magdeburg, 1791); J. C. Meyer, *Leben, Charakter und Schriften Basedows* (2 vols., Hamburg, 1791-1792); G. P. R. Hahn, *Basedow und sein Verhaltnis zu Rousseau* (Leipzig, 1885); A. Pinloche, *Basedow et le philanthropinisme* (Paris, 1890); C. Gössgen, *Rousseau und Basedow* (1891).

BASE FEE, in law, a freehold estate of inheritance which is limited or qualified by the existence

of certain conditions. In modern property law the commonest example of a base fee is an estate created by a tenant in tail, not in possession, who bars the entail without the consent of the protector of the settlement. Though he bars his own issue, he cannot bar any remainder or reversion, and the estate (*i.e.* the *base fee*) thus created is determinable on the failure of his issue in tail. An example of this kind of estate was introduced by George Eliot into the plot of *Felix Holt*. Another example of a base fee is an estate descendible to heirs general, but terminable on an uncertain event; for example, a grant of land to A and his heirs, tenants of the manor of Dale. The estate terminates whenever the prescribed qualification ceases. An early meaning of base fee was an estate held not by free or military service, but by base service, *i.e.* at the will of the lord.

BASEL (Fr. $B\hat{a}le$), one of the most northerly of the Swiss cantons, and the only one (save Schaffhausen) that includes any territory north of the Rhine. It is traversed by the chain of the Jura, and is watered by the Birs and the Ergolz, both tributaries (left) of the Rhine. It is traversed by railways from Basel to Olten (25 m.) and to Laufen (14½ m.), besides local lines from Basel to Flühen (8 m.) for the frequented pilgrimage resort of Mariastein, and from Liestal to Waldenburg (8¾ m.), From 1803 to 1814 the canton was one of the six "Directorial" cantons of the Confederation. Since 1833 it has been divided into two half cantons, with independent constitutions.

One is that of Basel Stadt or Bâle Ville, including, besides the city of Basel, the three rural districts (all to the north of the Rhine) of Riehen, Bettingen and Klein Hüningen (the latter now united to the city). The total area of this half canton is 13.7 sq. m. only, of which 11 sq. m. are classed as "productive," forests occupying 1.5 sq. m., but its total population in 1900 was 112,227 (of whom 3066 inhabited the rural districts), mainly German-speaking, and numbering 73,063 Protestants, 37,101 Romanists (including the Old Catholics), and 1897 Jews. The cantonal constitution dates from 1889. The executive of seven members and the legislature (*Grossrat*) of 130 members, as well as the one member sent to the Federal *Ständerat* and the six sent to the Federal *Nationalrat*, are all elected by a direct popular vote for the term of three years. Since 1875, 1000 citizens can claim a popular vote (*facultative Referendum*) on all bills, or can exercise the right of *initiative* whether as to laws or the revision of the cantonal constitution.

The other half canton is that of Basel Landschaft or Bâle Campagne, which is divided into four administrative districts and comprises seventy-four communes, its capital being Liestal. Its total area is 165 sq. m., of which all but 5 sq. m. is reckoned "productive" (including 55.9 sq. m. of forests). In 1900 its total population was 68,497, nearly all German-speaking, while there were 52,763 Protestants, 15,564 Romanists, and 130 Jews.

The cantonal constitution dates from 1892. The executive of 5 members and the legislature or *Landrat* (one member per 800 inhabitants or fraction over 400), as well as the single member sent to the Federal *Ständerat* and the three sent to the Federal *Nationalrat*, are all elected by a direct popular vote for three years. The "obligatory Referendum" obtains in the case of all laws, while 1500 citizens have the right of "initiative" whether as to laws or the revision of the cantonal constitution. Silk ribbon weaving, textile industries and the manufacture of tiles are carried on.

(W. A. B. C.)

BASEL (Fr. Bâle, but Basle is a wholly erroneous form; Ital. Basilea), the capital of the Swiss half canton of Basel Stadt or Bâle Ville. It is now the second most populous (109,161 inhabitants) town (ranking after Zürich) in the Swiss Confederation, while it is reputed to be the richest, the number of resident millionaires (in francs) exceeding that of any other Swiss town. Both facts are largely due to the opening (1882) of the St Gotthard railway, as merchandise collected from every part of north and central Europe is stored in Basel previous to being redistributed by means of that line. Hence the city has an extremely large and flourishing transit trade, despite the rather dingy appearance of its older portions. The city is divided by the Rhine into Gross Basel (south) and Klein Basel (north), the former being by far the larger. There are several bridges over the river, the old wooden bridge having been replaced in 1905 by one built of stone. The central or main railway station is in Gross Basel, while the Baden station is in Klein Basel. The most prominent building in the city is the cathedral or Münster, built of deep red sandstone, on a terrace high above the Rhine. It was consecrated in 1019, but was mainly rebuilt after the disastrous earthquake of 1356 that nearly ruined the city. The public meetings of the great oecumenical council (1431-1449) were held in the choir, while the committees sat in the chapterhouse. Erasmus lived in Basel 1521-1529, and on his death there (1536) was buried in the cathedral, attached to which are cloisters, in which various celebrated men are buried, e.g. Oecolampadius (d. 1531), Grynaeus (d. 1541), Buxtorf (d. 1732). The 16th-century Rathaus or town hall has recently been restored. In the museum is a fine collection of works of art by Holbein (who lived in Basel from 1528 to 1531), while the historical museum (in the old Franciscan church) contains many treasures, and among them the fragments of the famous Dance of Death, wrongly attributed to Holbein. The university (founded by Pius II. in 1460) is the oldest in Switzerland, and of late years has been extended by the construction of detached buildings for the study of the natural sciences, e.g. the Vesalianum and the Bernoullianum. The university library is very rich, and contains the original MSS. of the acts of the great oecumenical council. There are a number of modern monuments in the city, the most important being that set up to the memory of the Swiss who fell in the battle of St Jakob (1444), won by the French. Basel is the seat of the chief missionary society in Switzerland, the training school for missionaries being at St Chrischona, 6 m. out of the city.

[v.03 p.0463]

The town was founded in A.D. 374 by the emperor Valentinian, from whose residence there it

takes its name. In the 5th century the bishop of Augusta Rauricorum (now called Kaiser Augst), 7½ m. to the east, moved his see thither. Henceforth the history of the city is that of the growing power, spiritual and temporal, of the bishops, whose secular influence was gradually supplanted in the 14th century by the advance of the rival power of the burghers. In 1356 the city was nearly destroyed by a great earthquake. After long swaying between the neighbouring Rhine cities and the Swiss Confederation, it was admitted into the latter in 1501. It later became one of the chief centres of the Reformation movement in Switzerland, so that the bishop retired in 1525 to Porrentruy, where he resided till 1792, finally settling at Soleure in 1828, the bishopric having been wholly reorganized since 1814. As in other Swiss towns the trade gilds got all political power into their hands, especially by the 18th century. They naturally favoured the city at the expense of the rural districts, so that in 1832 the latter proclaimed their independence, and in 1833 were organized into the half canton of Basel Landschaft, the city forming that of Basel Stadt

See Basler Biographien (3 vols., 1900-1905); Basler Chroniken (original chronicles), (5 vols., Leipzig, 1872-1890); H. Boos, Geschichte von Basel, vol. i. (to 1501) alone published (1877); A. Burckhardt, Bilder aus d. Geschichte von Basel (3 vols., 1869-1882); Festschrift z. 400ten Jahrestage d. ewig. Bundes zwisch. B. und den Eidgenossen (1901); T. Geering, Handel und Industrie d. Stadt Basel (1885); A. Heusler, Verfassungsgeschichte d. Stadt Basel im Mittelalter (1860), and Rechtsquellen von Basel (2 vols., 1856-1865); L. A. Stocker, Basler Stadtbilder (1890); L. Stouff, Pouvoir temporel des évêques de Bâle (2 vols., Paris, 1891); R. Thommen, Gesch. d. Universität B., 1532-1632 (1889); Urkundenbuch d. Landschaft B. (pub. from 1881), and ditto for the city (pub. from 1890); W. Vischer, Gesch. d. Universität B., 1460-1529 (1860); R. Wackernagel, Gesch. d. Stadt Basel (3 vols., 1906 sqq.); K. Weber, Die Revolution im Kanton Basel, 1830-1833 (1907); G. Gautherot, La République rauracienne (1908).

(W. A. B. C.)

BASEL, CONFESSION OF, one of the many statements of faith produced by the Reformation. It was put out in 1534 and must be distinguished from the First and Second Helvetic Confessions, its author being Oswald Myconius, who based it on a shorter confession promulgated by Oecolampadius, his predecessor in the church at Basel. Though it was an attempt to bring into line with the reforming party both those who still inclined to the old faith and the anabaptist section, its publication provoked a good deal of controversy, especially on its statements concerning the Eucharist, and the people of Strassburg even reproached those of Basel with celebrating a Christless supper. Up to the year 1826 the Confession (sometimes also known as the Confession of Mühlhausen from its adoption by that town) was publicly read from the pulpits of Basel on the Wednesday of Passion week in each year. In 1872 a resolution of the great council of the city practically annulled it.

BASEL, COUNCIL OF. A decree of the council of Constance (9th of October 1417) sanctioned by Martin V. had obliged the papacy periodically to summon general councils. At the expiry of the first term fixed by this decree, Martin V. did, in fact, call together at Pavia a council, which it was necessary to transfer almost at once to Siena, owing to an epidemic, and which had to be dissolved owing to circumstances still imperfectly known, just as it was beginning to discuss the subject of reform (1424). The next council was due to assemble at the expiry of seven years, *i.e.* in 1431; with his usual punctuality, Martin V. duly convoked it for this date to the town of Basel, and selected to preside over it the cardinal Julian Cesarini, a man of the greatest worth, both intellectually and morally. Martin himself, however, died before the opening of the synod.

From Italy, France and Germany the fathers were slow in appearing at Basel. Cesarini devoted all his energies to the war against the Hussites, until the disaster of Taus forced him hastily to evacuate Bohemia. The progress of heresy, the reported troubles in Germany, the war which had lately broken out between the dukes of Austria and Burgundy, and finally, the small number of fathers who had responded to the summons of Martin V., caused that pontiff's successor, Eugenius IV., to think that the synod of Basel was doomed to certain failure. This opinion, added to the desire which he had of himself presiding over the council, induced him to recall the fathers from Germany, whither his health, impaired of late, probably owing to a cerebral congestion, rendered it all the more difficult for him to go. He commanded the fathers to disperse, and appointed Bologna as their meeting-place in eighteen months' time, his intention being to make the session of the council coincide with some conferences with representatives of the Greek church, which were to be held there with a view to union (18th December 1431).

This order led to an outcry among the fathers of Basel and incurred the deep disapproval of the legate Cesarini. The Hussites, it was said, would think that the Church was afraid to face them; the laity would accuse the clergy of shirking reform; in short, this failure of the councils would produce disastrous effects. In vain did the pope explain his reasons and yield certain points; the fathers would listen to nothing, and, relying on the decrees of the council of Constance, which amid the troubles of the schism had proclaimed the superiority, in certain cases, of the council over the pope, they insisted upon their right of remaining assembled, hastily beat up the laggards, held sessions, promulgated decrees, interfered in the government of the papal countship of Venaissin, treated with the Hussites, and, as representatives of the universal Church, presumed to impose laws upon the sovereign pontiff himself. Eugenius IV. resolved to resist this supremacy, though he did not dare openly to repudiate a very widespread doctrine considered by many to be the actual foundation of the authority of the popes before the schism. However, he soon realized the impossibility of treating the fathers of Basel as ordinary rebels, and tried a compromise; but as time went on, the fathers became more and more intractable, and

between him and them gradually arose an impassable barrier.

Abandoned by a number of his cardinals, condemned by most of the powers, deprived of his dominions by *condottieri* who shamelessly invoked the authority of the council, the pope made concession after concession, and ended on the 15th of December 1433 by a pitiable surrender of all the points at issue in a bull, the terms of which were dictated by the fathers of Basel, that is, by declaring his bull of dissolution null and void, and recognizing that the synod had not ceased to be legitimately assembled. It would be wrong, however, to believe that Eugenius IV. ratified all the decrees coming from Basel, or that he made a definite submission to the supremacy of the council. No express pronouncement on this subject could be wrung from him, and his enforced silence concealed the secret design of safeguarding the principle of sovereignty.

The fathers, who were filled with suspicion, would only allow the legates of the pope to preside over them on condition of their recognizing the superiority of the council; the legates ended by submitting to this humiliating formality, but in their own name only, thus reserving the judgment of the Holy See. Nay more, the difficulties of all kinds against which Eugenius had to contend, the insurrection at Rome, which forced him to escape by the Tiber, lying in the bottom of a boat, left him at first little chance of resisting the enterprises of the council. Emboldened by their success, the fathers approached the subject of reform, their principal object being to curtail the power and resources of the papacy. This is why, besides the disciplinary measures which regulated the elections, the celebration of divine service, the periodical holding of diocesan synods and provincial councils, are found also decrees aimed at some of the "rights" by which the popes had extended their power, and helped out their finances at the expense of the local churches. Thus annates (q.v.) were abolished, the abuse of "reservation" of the patronage of benefices by the pope was much limited, and the right claimed by the pope of "next presentation" to benefices not yet vacant (known as gratiae expectativae) was done away with altogether. By other decrees the jurisdiction of the court of Rome was much limited, and rules were even made for the election of popes and the constitution of the Sacred College. The fathers continued to devote themselves to the subjugation of the Hussites; they also intervened, in rivalry with the pope, in the negotiations between France and England which led only to the treaty of Arras, concluded by Charles VII. with the duke of Burgundy; finally, they investigated and judged numbers of private cases, lawsuits between prelates, members of religious orders and holders of benefices, thus themselves falling into one of the serious abuses for which they had most blamed the court of Rome.

The democratic character of the assembly of Basel was the result both of its composition and of its organization; not only was the number of prelates in it always small in comparison with that of the doctors, masters, representatives of chapters, monks or clerks of inferior orders, but the influence of the superior clergy had all the less weight because, instead of being separated into "nations," as at Constance, the fathers divided themselves according to their tastes or aptitudes into four large committees or "deputations" (deputationes), one concerned with questions of faith (fidei), another with negotiations for peace (pacis), the third with reform (reformatorii), the fourth with what they called "common concerns" (pro communibus). Every decision made by three of these "deputations"—and in each of them the lower clergy formed the majority—was ratified for the sake of form in general congregation, and if necessary led to decrees promulgated in session. It was on this account that the council could sometimes be called, not without exaggeration, "an assembly of copyists" or even "a set of grooms and scullions."

Eugenius IV., however much he may have wished to keep on good terms with the fathers of Basel, was neither able nor willing to accept or observe all their decrees. The question of the union with the Greek church, especially, gave rise to a misunderstanding between them which soon led to a rupture. The emperor John Palaeologus, pressed hard by the Turks, showed a great desire to unite himself with the Catholics; he consented to come with the principal representatives of the Greek church to some place in the west where the union could be concluded in the presence of the pope and of the Latin council. Hence arose a double negotiation between him and Eugenius IV. on the one hand and the fathers of Basel on the other. The chief object of the latter was to fix the meeting-place at a place remote from the influence of the pope, and they persisted in suggesting Basel or Avignon or Savoy, which neither Eugenius nor the Greeks would on any account accept. The result was that Palaeologus accepted the offers of the pope, who, by a bull dated the 18th of September 1437, again pronounced the dissolution of the council of Basel, and summoned the fathers to Ferrara, where on the 8th of January 1438 he opened a new synod which he later transferred to Florence. In this latter town took place the momentary union, which was more apparent than real, between the Latin and the Greek church (6th July 1439). During this time the council of Basel, though abandoned by Cesarini and most of its members, persisted none the less, under the presidency of Cardinal Aleman, in affirming its oecumenical character. On the 24th of January 1438 it suspended Eugenius IV., and went on in spite of the intervention of most of the powers to pronounce his deposition (25th June 1439), finally giving rise to a new schism by electing on the 4th of November Amadeus VIII., duke of Savoy, as pope, who took the name of Felix V.

This schism lasted fully ten years, although the antipope found hardly any adherents outside of his own hereditary states, those of Alphonso of Aragon, of the Swiss confederation and certain universities. Germany remained neutral; Charles VII. of France confined himself to securing to his kingdom by the Pragmatic Sanction of Bourges, which became law on the 13th of July 1438, the benefit of a great number of the reforms decreed at Basel; England and Italy remained faithful to Eugenius IV. Finally, in 1447 Frederick III., king of the Romans, after negotiations with Eugenius, commanded the burgomaster of Basel not to allow the presence of the council any

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longer in the imperial city. In June 1448 the rump of the council migrated to Lausanne. The antipope, at the instance of France, ended by abdicating (7th April 1449). Eugenius IV. died on the 23rd of February 1447, and the fathers of Lausanne, to save appearances, gave their support to his successor, Nicholas V., who had already been governing the Church for two years. Trustworthy evidence, they said, proved to them that this pontiff accepted the dogma of the superiority of the council as it had been defined at Constance and at Basel. In reality, the struggle which they had carried on in defence of this principle for seventeen years, with a good faith which it is impossible to ignore, ended in a defeat. The papacy, which had been so fundamentally shaken by the great schism of the West, came through this trial victorious. The era of the great councils of the 15th century was closed; the constitution of the Church remained monarchical.

Authorities.—Mansi, vol. xxix.-xxxi.; Aeneas Sylvius, *De rebus Basileae gestis* (Fermo, 1803); Hefele, *Conciliengeschichte*, vol. vii. (Freiburg-im-Breisgau, 1874); O. Richter, *Die Organisation und Geschaftsordnung des Baseler Konzils* (Leipzig, 1877); *Monumenta Conciliorum generalium seculi xv., Scriptorum*, vol. i., ii. and iii. (Vienna, 1857-1895); J. Haller, *Concilium Basiliense*, vol. i.-v. (Basel, 1896-1904); G. Perouse, *Le Cardinal Louis Aleman, président du concile de Bâle* (Paris, 1904). Much useful material will also be found in J. C. L. Gieseler's *Ecclesiastical History*, vol. iv. p. 312, &c., notes (Eng. trans., Edinburgh, 1853).

(N. V.)

BASEMENT, the term applied to the lowest storey of any building placed wholly or partly below the level of the ground. It is incorrectly applied to the ground storey of any building, even when, as for instance in the case of Somerset House, London, the ground floor is of plain or rusticated masonry, and the upper storey which it supports is divided up and decorated with columns or pilasters.

BASHAHR, or BISAHIR, a Rajput hill state, within the Punjab, amid the Himalayan mountains, with an area of 3820 sq. m. and a population in 1901 of 80,582. In 1898, the raja being of weak intellect and without heir, the administration was undertaken by a British official. In 1906 there were some local troubles owing to the refusal of the people to pay taxes. The revenue is obtained chiefly from land and forests, the latter being leased to the British government.

BASHAN, a region lying E. of the Jordan, and towards its source. Its boundaries are not very well defined, but it may be said in general to have been north of the territory of Gilead. The name first appears in Hebrew history in connexion with the wanderings of the Israelites. According to Numbers xxi. 33, the tribes after the rout of Sihon, king of the Amorites, turned to go by the land of Bashan; and its king, Og, met them at Edrei, and was there defeated and slain. The value of this narrative is a matter of much dispute. The gigantic stature of the king, and the curious details about his "bedstead" (Deut. iii. 11) are regarded as suggestive of legend; to say nothing of the lateness of all the documents relating to the wars of Og, and the remoteness of Bashan from the regions of the Israelites' wandering. The story, however, had so firm a hold on Hebrew tradition that it can hardly fail to have some basis in fact; and an invasion by Israel of Bashan before coming to Jordan is by no means an improbability.

The great stature of Og is explained in the passage of Deuteronomy mentioned by the statement that he was of the remnant of the aboriginal Rephaim. This was a race distinguished by lofty stature; and in Genesis xiv. 5 we find them established in Ashteroth-Karnaim (probably the same as Ashtaroth, which, as we shall see, was an important city of Bashan). The territory was allotted on the partition of the conquered land to the eastern division of the tribe of Manasseh (Numbers xxxiii. 33; Josh. xiii. 29). One of the cities of refuge, Golan, was in Bashan (Deut. iv. 43). By Solomon, Bashan, or rather "the region of Argob in Bashan," containing "threescore great cities with walls and brazen bars," was assigned to the administrative district of Ben-Geber, one of his lieutenants (1 Kings iv. 13, compare ver. 19). In the days of Jehu the country was taken from Israel by Hazael, king of Syria (2 Kings x. 33). This is the last historical event related in the Old Testament of Bashan. In the poetical and prophetic books it is referred to in connexion with the products for which it was noted. From a passage in the "Blessing of Moses" (Deut. xxxiii. 22) it seems to have been inhabited by lions. Elsewhere it is referred to in connexion with its cattle (Deut. xxxii. 14; Ezek. xxxix. 18), which seem to have been proverbial for ferocity (Ps. xxii. 12); Amos (iv. 1) calls the wealthy women of Samaria, who oppressed the poor, "kine of Bashan." It is also noted for its mountain (Ps. lxviii. 15), and especially for oaks, which are coupled with the cedars of Lebanon (Isa. ii. 13; compare xxxiii. 9; Zechariah xi. 2). Oars were made from them (Ezek. xxvii. 6).

The boundaries of Bashan may to some extent be deduced from the indications afforded in the earlier historical books. Og dwelt at Ashteroth, and did battle with the Israelites at Edrei (Deut. i. 4). In Deut. iii. 4, "the region of Argob" with its threescore cities is mentioned; Mt. Hermon is referred to as a northern limit, and Salecah is alluded to in addition to the other cities already mentioned. Josh. xii. 4 and Josh. xiii. 29 confirm this. Josephus (*Ant.* iv. 5. 3; *Wars*, ii. 6. 3) enumerates four provinces of Bashan, Gaulanitis, Trachonitis, Auranitis and Batanaea. Gaulanitis (which probably derived its name from the city of refuge, Golan, the site of which has not yet been discovered) is represented by the modern Jaulān, a province extending from the Jordan lakes to the Haj Road. Josephus (*Wars*, iv. 1. 1) speaks of it as divided into two sections, Gamalitis and Sogana. Trachonitis (mentioned in Luke iii. 1 as in the territory of Philip the tetrarch) adjoined the territory of Damascus, Auranitis and Batanaea. This corresponds to the *Trachōnes* of Strabo (xvi. 20), and the modern district of the Lejā; inscriptions have been found in the Lejā

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giving Trachōn as its former name. Auranitis is the Hauran of Ezekiel xlvii. 16, and of the modern Arabs. It is south of the Jaulān and north of Gilead. According to Porter (*Journal Soc. Lit.*, 1854, p. 303), the name is locally restricted to the plain south of the Lejā. and the narrow strip on the west; although it is loosely applied by strangers to the whole country east of the Jaulān. The fourth province, Batanaea, which still is remembered in the name '*Ard el-Bathaniyeh*, lies east of the Lejā and the Hauran plain, and includes the Jebel ed-Drūz or Hauran mountain.

The identification of Argob, a region of the kingdom of Og, is a matter of much difficulty. It has been equated on philological grounds to the Lejā. But these arguments have been shown to be shaky if not baseless, and the identification is now generally abandoned. The confidence with which the great cities of Og were identified with the extensive remains of ancient sites in the Lejā and Hauran has also been shown to be without justification. All the so-called "giant cities of Bashan" without exception are now known to be Greco-Roman, not earlier than the time of Herod, and, though in themselves of very high architectural and historical interest, have no connexion whatever with the more ancient periods. No tangible traces of Og and his people, or even of their Israelite supplanters, have yet been found.

This fact somewhat weakens the various identifications that have been proposed for the cities of Bashan enumerated by name. Edrei for example is identified with *Ed-Dera'a*. This is perhaps the most satisfactory comparison, for besides the Greco-Roman remains there is an extensive subterranean city of unknown date, which may be of great antiquity, though even this is still *sub judice*. The other identifications that have commanded most acceptance are as follows:— Ashteroth Karnaim, also called Ashtaroth and (Josh. xxi. 27) Be-eshterah, has been identified with *Busrah* (Bostra), where are very important Herodian ruins, but there is no tangible evidence yet adduced that the history of this site is of so remote antiquity. From the similarity of the names, it has also been sought at *Tell Ashari* and *Tell 'Ashtera*. The true site can be determined, if at all; by excavation only; identifications based on mere outward similarity of names have always been fruitful sources of error. Salecah is perhaps less doubtful; it is a remarkable name, and a ruin similarly styled, *Salkhat*, is to be seen in the Hauran. It is inhabited by Druses. Another town in eastern Manasseh, namely Kenath, has been identified by Porter with Kanawat, which may be correct.

In the later history Bashan became remarkable as a refuge for outlaws and robbers, a character it still retains. The great subterranean "city" at Ed-Dera'a has been partially destroyed by the local sub-governor, in order to prevent it becoming a refuge of fugitives from justice or from government requirements (conscription, taxation, &c.). Strabo refers to a great cave in Trachonitis capable of holding 4000 robbers. Arab tradition regards it as the home of Job; and it is famous as being the centre of the Ghassanid dynasty. The Hauran is one of the principal habitations of the sect of the Druses (q,v).

The physical characteristics of Bashan are noteworthy. Volcanic in origin—the Jebel ed-Druz is a group of extinct volcanoes—the friable volcanic soil is extraordinarily fertile. It is said to yield wheat eighty-fold and barley a hundred. The oaks for which the country was once famous still distinguish it in places.

Bibliography.—In addition to books mentioned under Palestine see the following:—U. J. Seetzen, Reisen durch Syrien, Palastina, Phonicien, &c. (4 vols., 1854); Rev. J. L. Porter, Five Years in Damascus (2 vols., 1855); The Giant Cities of Bashan (out of date, but some of the descriptions good, 1865); J. G. Wetzstein, Reisebericht über Hauran und die Trachonen (Berlin, 1860); Sir R. F. Burton and C. F. T. Drake, Unexplored Syria (1872); G. Schumacher, The Jaulān (1888); Abila, Fella and Northern Ajlun (1890); Across the Jordan (1886), (Palestine Exploration Fund); Rev. W. Ewing, A Journey in the Hauran (with a large collection of inscriptions); Palestine Exploration Fund Quarterly Statement, 1895; W. H. Waddington's Inscriptions of Syria may also be consulted; Dussaud (René) and Frédéric Macler, Voyage archéologique au Safâ et dans le Djabel ed-Drūz (1901). In 1900 an important survey of the Hauran and neighbouring regions was made under American auspices, directed by Dr Enno Littmann; the publication of the great harvest of results was begun in 1906.

(R. A. S. M.)

BASHI-BAZOUK, the name given to a species of irregular mounted troops employed by the Turks. They are armed and maintained by the government but do not receive pay. They do not wear uniform or distinctive badges. They fight either mounted or dismounted, chiefly the latter, but are incapable of undertaking serious work, because of their lack of discipline. Their uncertain temper has sometimes made it necessary for the Turkish regular troops to disarm them by force, but they are often useful in the work of reconnaissance and in outpost duty. They are accused, and generally with justice, of robbery and maltreatment of the civil population, resembling in those things, as in their fighting methods and value, the Croats, Pandours and Tolpatches of 18th-century European armies. The term is also used of a mounted force, existing in peace time in various provinces of the Turkish empire, which performs the duties of gendarmerie.

BASHKALA, the chief town of a sanjak of the vilayet of Van in Asiatic Turkey. It is a military station, situated at an elevation of 7500 ft. above sea-level in the valley of the Great Zab river. It stands on the east slope of lofty bare mountains, overlooking a wide valley on the farther side of which flows the Zab. On a knoll above is a ruined fortress formerly occupied by a Kurdish Bey. The population numbers some 10,000, principally Kurds, but including 1500 Armenians and 1000 Jews. The place is important as the centre of the Hakkiari sanjak, a very difficult mountain

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district to the south-west containing numerous tribes of Kurds and Nestorian Christians, and also the many Kurdish tribes along the Persian frontier. The houses are well built of sun-dried brick, and the streets are wide and fairly clean. Good smiths' and carpenters' work is done. The bazaar is small, although a thriving trade is done with the mountain districts. Owing to the great elevation the winter is extremely severe, and the summer of short duration. Wheat, barley, millet and sesame are cultivated on the plain, but fruit and vegetables have mostly to be imported from Persia. Roads lead to Van, Urmia in Persia and Mosul through the Nestorian country. The Kurd and Nestorian tribes in the wilder parts of the Hakkiari Mountains are under slight government control, and are permitted to pay tribute and given self-government in a large degree.

(F. R. M.)

BASHKIRS, a people inhabiting the Russian governments of Ufa, Orenburg, Perm and Samara, and parts of Vyatka, especially on the slopes and confines of the Ural, and in the neighbouring plains. They speak a Tatar language, but some authorities think that they are ethnically a Finnish tribe transformed by Tatar influence. The name Bashkir or Bash-kûrt appears for the first time in the beginning of the 10th century in the writings of Ibn-Foslan, who, describing his travels among the Volga-Bulgarians, mentions the Bashkirs as a warlike and idolatrous race. The name was not used by the people themselves in the 10th century, but is a mere nickname.

Of European writers, the first to mention the Bashkirs are Joannes de Plano Carpini (c. 1200-1260) and William of Rubruquis (1220-1293). These travellers, who fell in with them in the upper parts of the river Ural, call them Pascatir, and assert that they spoke at that time the same language as the Hungarians. Till the arrival of the Mongolians, about the middle of the 13th century, the Bashkirs were a strong and independent people and troublesome to their neighbours, the Bulgarians and Petchenegs. At the time of the downfall of the Kazan kingdom they were in a weak state. In 1556 they voluntarily recognized the supremacy of Russia, and, in consequence, the city of Ufa was founded to defend them from the Kirghiz, and they were subjected to a fur-tax. In 1676 they rebelled under a leader named Seit, and were with difficulty reduced; and again in 1707, under Aldar and Kûsyom, on account of ill-treatment by the Russian officials. Their third and last insurrection was in 1735, at the time of the foundation of Orenburg, and it lasted for six years. In 1786 they were freed from taxes; and in 1798 an irregular army was formed from among them. They are now divided into cantons and give little trouble, though some differences have arisen between them and the government about land questions. By mode of life the Bashkirs are divided into settled and nomadic. The former are engaged in agriculture, cattlerearing and bee-keeping, and live without want. The nomadic portion is subdivided, according to the districts in which they wander, into those of the mountains and those of the steppes. Almost their sole occupation is the rearing of cattle; and they attend to that in a very negligent manner, not collecting a sufficient store of winter fodder for all their herds, but allowing part of them to perish. The Bashkirs are usually very poor, and in winter live partly on a kind of gruel called yûryu, and badly prepared cheese named skûrt. They are hospitable but suspicious, apt to plunder and to the last degree lazy. They have large heads, black hair, eyes narrow and flat, small foreheads, ears always sticking out and a swarthy skin. In general, they are strong and muscular, and able to endure all kinds of labour and privation. They profess Mahommedanism, but know little of its doctrines. Their intellectual development is low.

See J. P. Carpini, *Liber Tartarorum*, edited under the title *Relations des Mongols ou Tartares*, by d'Avezac (Paris, 1838); Gulielmus de Rubruquis, *The Journey of William of Rubruck to the Eastern Parts of the World*, translated by W. W. Rockhill (London, 1900); Semenoff, *Slovar Ross. Imp.*, s.v.; Frahn, "De Baskiris," in *Mém. de l'Acad. de St-Pétersbourg* (1822); Florinsky, in *Westnik Evropi* (1874); and Katarinskij, *Dictionnaire Bashkir-Russe* (1900).

BASHKIRTSEFF, MARIA CONSTANTINOVA [Marie] (1860-1884), Russian artist and writer, was born at Gavrontsi in the government of Pultowa in Russia on the 23rd of November 1860. When Marie was seven years old, as her father (marshal of the nobility at Pultowa) and her mother were unable through incompatibility to live together, Madame Bashkirtseff with her little daughter left Russia to spend the winters at Nice or in Italy, and the summers at German watering-places. Marie acquired an education superior to that given to most girls of her rank. She could read Plato and Virgil in the original, and write four languages with almost equal facility. A gifted musician, she at first hoped to be a singer, and studied seriously in Italy to that end; her voice, however, was not strong enough to stand hard work and failed her. Meanwhile she was also learning to draw. When she lost her voice she devoted herself to painting, and in 1877 settled in Paris, where she worked steadily in Tony Robert-Fleury's studio. In 1880 she exhibited in the salon a portrait of a woman; in 1881 she exhibited the "Atelier Julian"; in 1882 "Jean et Jacques"; in 1884 the "Meeting," and a portrait in pastel of a lady—her cousin—now in the Luxembourg gallery, for which she was awarded a mention honorable. Her health, always delicate, could not endure the labour she imposed on herself in addition to the life of fashion in which she became involved as a result of her success as an artist, and she died of consumption on the 31st of October 1884, leaving a small series of works of remarkable promise. From her childhood Marie Bashkirtseff kept an autobiographical journal; but the editors of these brilliant confessions (Journal de Marie Bashkirtseff, 1890), aiming apparently at captivating the reader's interest by the girl's precocious gifts and by the names of the various distinguished persons with whom she came in contact, so treated certain portions as to draw down vehement protest. This, to some extent, has brought into question the stamp of truthfulness which constitutes the chief merit of this extraordinarily interesting book. A further instalment of Marie Bashkirtseff literature was published in the shape of letters between her and Guy de Maupassant, with whom

she started a correspondence under a feigned name and without revealing her identity.

See Mathilde Blind, A Study of Marie Bashkirtseff (T. Fisher Unwin, 1892); The Journal of Marie Bashkirtseff: an Exposure and a Defence, by "S." (showing that there is throughout a mistake of four years in the date of the diary); Black and White, 6th Feb. and 11th April 1891, pp. 17, 304; The Journal of Marie Bashkirtseff, translated, with an Introduction, by Mathilde Blind (2 vols., London, 1890); The Letters of Marie Bashkirtseff (1 vol.).

(B. K.)

BASIL,^[1] known as Basil the Great (c. 330-379), bishop of Caesarea, a leading churchman in the 4th century, came of a famous family, which gave a number of distinguished supporters to the Church. His eldest sister, Macrina, was celebrated for her saintly life; his second brother was the famous Gregory of Nyssa; his youngest was Peter, bishop of Sebaste; and his eldest brother was the famous Christian jurist Naucratius. There was in the whole family a tendency to ecstatic emotion and enthusiastic piety, and it is worth noting that Cappadocia had already given to the Church men like Firmilian and Gregory Thaumaturgus. Basil was born about 330 at Caesarea in Cappadocia. While he was still a child, the family removed to Pontus; but he soon returned to Cappadocia to live with his mother's relations, and seems to have been brought up by his grandmother Macrina. Eager to learn, he went to Constantinople and spent four or five years there and at Athens, where he had Gregory (q,v) of Nazianzus for a fellow-student. Both men were deeply influenced by Origen, and compiled the well-known anthology of his writings, known as Philocalia (edited by J. A. Robinson, Cambridge, 1893). It was at Athens that he seriously began to think of religion, and resolved to seek out the most famous hermit saints in Syria and Arabia, in order to learn from them how to attain to that enthusiastic piety in which he delighted, and how to keep his body under by maceration and other ascetic devices. After this we find him at the head of a convent near Arnesi in Pontus, in which his mother Emilia, now a widow, his sister Macrina and several other ladies, gave themselves to a pious life of prayer and charitable works. He was not ordained presbyter until 365, and his ordination was probably the result of the entreaties of his ecclesiastical superiors, who wished to use his talents against the Arians, who were numerous in that part of the country and were favoured by the Arian emperor, Valens, who then reigned in Constantinople. In 370 Eusebius, bishop of Caesarea, died, and Basil was chosen to succeed him. It was then that his great powers were called into action. Caesarea was an important diocese, and its bishop was, ex officio, exarch of the great diocese of Pontus. Hotblooded and somewhat imperious, Basil was also generous and sympathetic. "His zeal for orthodoxy did not blind him to what was good in an opponent; and for the sake of peace and charity he was content to waive the use of orthodox terminology when it could be surrendered without a sacrifice of truth." He died in 379.

The principal theological writings of Basil are his *De Spiritu Sancto*, a lucid and edifying appeal to Scripture and early Christian tradition, and his three books against Eunomius, the chief exponent of Anomoian Arianism. He was a famous preacher, and many of his homilies, including a series of lenten lectures on the *Hexaëmeron*, and an exposition of the psalter, have been preserved. His ascetic tendencies are exhibited in the *Moralia* and *Regulae*, ethical manuals for use in the world and the cloister respectively. His three hundred letters reveal a rich and observant nature, which, despite the troubles of ill-health and ecclesiastical unrest, remained optimistic, tender and even playful. His principal efforts as a reformer were directed towards the improvement of the liturgy, and the reformation of the monastic orders of the East. (See Basilian Monks.)

BIBLIOGRAPHY.—Editions of his works appeared at Basel (1532); Paris, by J. Garnier and P. Maranus (1721-1730), and by L. de Sinner (1839). Migne's *Patrol. ser. graec.* 29-32; *De Spiritu Sancto*, ed. C. F. H. Johnston (Oxford, 1892); *Liturgia*, ed. A. Robertson (London, 1894). See also the patrologies, *e.g.* that of O. Bardenhewer, and the histories of dogma, *e.g.* those of A. Harnack and F. Loofs.

[1] The name Basil also belongs to several other distinguished churchmen, (1) Basil, bishop of Ancyra from 336 to 360, a semi-Arian, highly favoured by the emperor Constantine, and a great polemical writer; none of his works are extant. (2) Basil of Seleucia (fl. 448-458), a bishop who shifted sides continually in the Eutychian controversy, and who wrote extensively; his works were published in Paris in 1622. (3) Basil of Ancyra, fl. 787; he opposed image-worship at the second council of Nicaea, but afterwards retracted. (4) Basil of Achrida, archbishop of Thessalonica about 1155; he was a stanch upholder of the claims of the Eastern Church against the widening supremacy of the papacy.

BASIL I. (d. 886), known as the "Macedonian", Roman emperor in the East, was born of a family of Armenian (not Slavonic) descent, settled in Macedonia. He spent a part of his boyhood in captivity in Bulgaria, whither his family was carried by the Bulgarian prince Krum in 813. He succeeded in escaping and was ultimately lucky enough to enter the service of Theophilitzes, a relative of the Caesar Bardas (uncle of Michael III.), as groom. It seems that while serving in this capacity he visited Patrae with his master, and gained the favour of Danielis, a very wealthy lady of that place, who received him into her household, and endowed him with a fortune. He earned the notice of Michael III. by winning a victory in a wrestling match, and soon became the emperor's boon companion and was appointed chamberlain (parakoemōmenos). A man of his stamp, advancing unscrupulously on the road of fortune, had no hesitation in divorcing his wife and marrying a mistress of Michael, Eudocia Ingerina, to please his master. It was commonly

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believed that Leo VI., Basil's successor and reputed son, was really the son of Michael. The next step was to murder the powerful Caesar Bardas, who, as the emperor was devoted to amusement, virtually ruled the empire; this was done with the emperor's consent by Basil's own hand (April 866), and a few weeks later Basil was raised to the imperial dignity. Hitherto few perhaps had divined in the unprincipled adventurer, who shared in the debauches of the imperial drunkard, the talents of a born ruler. On the throne he soon displayed the serious side of his nature and his exceptional capacities for administration. In September 867 he caused his worthless benefactor to be assassinated, and reigned alone. He inaugurated a new age in the history of the empire, associated with the dynasty which he founded,—"the Macedonian dynasty" it is usually called; it would be more instructive to call it "Armenian." It was a period of territorial expansion, during which the empire was the strongest power in Europe. The great legislative work which Basil undertook and his successor completed, and which may be described as a revival of Justinianean law, entitles him to the designation of a second Justinian (the Basilica, a collection of laws in sixty books; and the manuals known as the Prochiron and Epanagogē. For this legislation see Basilica and Roman Empire, Later). His financial administration was prudent. His ecclesiastical policy was marked by a wish to keep on good terms with Rome. One of his first acts was to exile the patriarch Photius and restore his rival Ignatius, whose claims were supported by the pope. Yet he had no intention of yielding to Rome's pretensions beyond a certain point. The decision of the Bulgarian tsar Michael to submit the new Bulgarian Church to the jurisdiction of Constantinople was a great blow to Rome, who had hoped to secure it for herself. In 877 Photius became patriarch again, and there was a virtual though not a formal breach with Rome. Thus the independence of the Greek Church may be said to date from the time of Basil. His reign was marked by a troublesome war with the Paulician heretics, an inheritance from his predecessor; the death of their able chief Chrysochir led to the definite subjection of this little state, of which the chief stronghold was Tephrice on the upper Euphrates, and which the Saracens had helped to bid a long defiance to the government of Constantinople. There was the usual frontier warfare with the Saracens in Asia Minor. Cyprus was recovered, but only retained for seven years. Syracuse was lost, but Bari was won back and those parts of Calabria which had been occupied by the Saracens. The last successes opened a new period of Byzantine domination in southern Italy. Above all, New Rome was again mistress of the sea, and especially of the gates of the Adriatic. Basil reigned nineteen years as sole sovereign. His death (29th of August 886) was due to a fever contracted in consequence of a serious accident in hunting. A stag dragged him from his horse by fixing its antlers in his belt. He was saved by an attendant who cut him loose with a knife. His last act was to cause his saviour to be beheaded, suspecting him of the intention to kill and not to rescue. Basil is one of the most remarkable examples of a man, without education and exposed to the most demoralizing influences, manifesting extraordinary talents in the government of a great state, when he had climbed to the throne by acts of unscrupulous bloodshed.

Sources.—*Vita Basilii*, by his grandson Constantine VII. (bk. v. of the *Continuation of Theophanes*, ed. Bonn); Genesius (ed. Bonn); *Vita Euthymii*, ed. De Boor (Berlin, 1888). Of the Arabic sources Tabari is the most important.

Modern Works.—Finlay, *History of Greece*, vol. ii. (Oxford, 1877); Gibbon, *Decline and Fall*, vols. v. and vi. (ed. Bury, London, 1898); Hergenröther, *Photius, Patriarch von Constantinopel*, vol. ii. (Regensburg, 1867).

(J. B. B.)

BASIL II. (c. 958-1025), known as Bulgaroktonos (slayer of Bulgarians), Roman emperor in the East, son of Romanus II. and Theophano, great-great-grandson of Basil I., was born about 958 and crowned on the 22nd of April 960. After their father's death (963) he and his younger brother Constantine were nominal emperors during the actual reigns of Nicephorus Phocas, their stepfather, and John Tzimisces. On the death of the latter (10th of January 976) they assumed the sovereignty without a colleague, but throughout their joint reign Constantine exercised no power and devoted himself chiefly to pleasure. This was in accordance with the Byzantine principle that in the case of two or more co-regnant basileis only one governed. Basil was a brave soldier and a superb horseman; he was to approve himself a strong ruler and an able general. He did not at first display the full extent of his energy. The administration remained in the hands of the eunuch Basileios (an illegitimate son of Romanus I.), president of the senate, a wily and gifted man, who hoped that the young emperors would be his puppets. Basil waited and watched without interfering, and devoted himself to learning the details of administrative business and instructing himself in military science. During this time the throne was seriously endangered by the rebellion of an ambitious general who aspired to play the part of Nicephorus Phocas or Tzimisces. This was Bardas Sclerus, whom the eunuch deposed from his post of general in the East. He belonged to the powerful landed aristocracy of Asia Minor, whose pretensions were a perpetual menace to the throne. He made himself master of the Asiatic provinces and threatened Constantinople. To oppose him, Bardas Phocas, another general who had revolted in the previous reign and been interned in a monastery, was recalled. Defeated in two battles, he was victorious in a third and the revolt was suppressed (979). Phocas remained general in the East till 987, when he rebelled and was proclaimed emperor by his troops. It seems that the minister Basileios was privy to this act, and the cause was dissatisfaction at the energy which was displayed by the emperor, who showed that he was determined to take the administration into his own hands and personally to control the army. Phocas advanced to the Hellespont and besieged Abydos. Basil obtained timely aid, in the shape of Varangian mercenaries, from his brother-in-law Vladimir, the Russian prince of Kiev, and marched to Abydos. The two armies were facing each other, when Basil galloped

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forward, seeking a personal combat with the usurper who was riding in front of his lines. Phocas, just as he prepared to face him, fell from his horse and was found to be dead. This ended the rebellion.

The fall of Basileios followed; he was punished with exile and the confiscation of his enormous property. Basil made ruthless war upon the system of immense estates which had grown up in Asia Minor and which his predecessor, Romanus I., had endeavoured to check. (For this evil and the legislation which was aimed at it see Roman Empire, Later.) He sought to protect the lower and middle classes.

Basil gained some successes against the Saracens (995); but his most important work in the East was the annexation of the principalities of Armenia. He created in those highlands a strongly fortified frontier, which, if his successors had been capable, should have proved an effective barrier against the invasions of the Seljuk Turks. The greatest achievement of the reign was the subjugation of Bulgaria. After the death of Tzimisces (who had reduced only the eastern part of the Bulgarian kingdom), the power of Bulgaria was restored by the Tsar Samuel, in whom Basil found a worthy foe. The emperor's first efforts against him were unsuccessful (981), and the war was not resumed till 996, Samuel in the meantime extending his rule along the Adriatic coast and imposing his lordship on Servia. Eastern Bulgaria was finally recovered in 1000; but the war continued with varying successes till 1014, when the Bulgarian army suffered an overwhelming defeat. Basil blinded 15,000 prisoners, leaving a one-eyed man to every hundred to lead them to their tsar, who fainted at the sight and died two days later. The last sparks of resistance were extinguished in 1018, and the great Slavonic realm lay in the dust. The power of Byzantium controlled once more the Illyrian peninsula. Basil died in December 1025 in the midst of preparations to send a naval expedition to recover Sicily from the Saracens.

Basil's reign marks the highest point of the power of the Eastern empire since Justinian I. Part of the credit is due to his predecessors Nicephorus and Tzimisces, but the greater part belongs to him. He dedicated himself unsparingly to the laborious duties of ruling, and he had to reckon throughout with the ill-will of a rich and powerful section of his subjects. He was hard and cruel, without any refinement or interest in culture. In a contemporary psalter (preserved in the library of St Mark at Venice) there is a portrait of him, with a grey beard, crowned and robed in imperial costume.

Authorities.—Leo Diaconus (ed. Bonn, 1828); Psellus, *History* (ed. Sathas, London, 1899); George Cedrenus (*Chronicle*, transcribed from the work of John Scylitzes, vol. ii., ed. Bonn, 1839); Zonaras, bk. xvii. (ed. Bonn, vol. iii., 1897); Cecaumenus, *Strategikon* (ed. Vasilievski and Jernstedt, St Petersburg, 1896); Yahyā of Antioch (contemporary Asiatic chronicle), extracts with Russian translation by Rosen (St Petersburg, 1883); Al Mekin (Elmacinus), *Historia Saracenica*, (ed. with Latin translation by Erpenius, Leiden, 1625); "Laws (*Novellae*) of Basil" (ed. Zachariä von Lingenthal, in *Jus Graeco-Romanum*, vol. iii., 1853); Finlay, *Hist. of Greece*; Gibbon, *Decline and Fall*; G. Schlumberger, *L'Épopée byzantine*, part i. and part ii. (Paris, 1896, 1900).

(I. B. B.)

BASIL (Russ. VASILY), the name of four grand-dukes of Moscow and tsars of Muscovy.

Basil I. Dmitrevich (1371-1425), son of Dmitri (Demetrius) Donskoi, whom he succeeded in 1389, married Sophia, the daughter of Vitovt, grand-duke of Lithuania. In his reign the grand-duchy of Muscovy became practically hereditary, and asserted its supremacy over all the surrounding principalities. Nevertheless Basil received his yarluik, or investiture, from the Golden Horde and was compelled to pay tribute to the grand khan, Tokhtamuish. He annexed the principality of Suzdal to Moscovy, together with Murom, Kozelsk Peremyshl, and other places; reduced the grand-duchy of Rostov to a state of vassalage; and acquired territory from the republic of Great Novgorod by treaty. In his reign occurred the invasion of Timur (1395), who ruined the Volgan regions, but did not penetrate so far as Moscow. Indeed Timur's raid was of service to the Russian prince as it all but wiped out the Golden Horde, which for the next twelve years was in a state of anarchy. During the whole of this time no tribute was paid to the khan, though vast sums of money were collected in the Moscow treasury for military purposes. In 1408 the Mirza Edigei ravaged Muscovite territory, but was unable to take Moscow. In 1412, however, Basil found it necessary to pay the long-deferred visit of submission to the Horde. The most important ecclesiastical event of the reign was the elevation of the Bulgarian, Gregory Tsamblak, to the metropolitan see of Kiev (1425) by Vitovt, grand-duke of Lithuania; the immediate political consequence of which was the weakening of the hold of Muscovy on the south-western Russian states. During Basil's reign a terrible visitation of the "Black Death" decimated the population.

See T. Schiemann, Russland bis ins 17. Jahrhundert (Gotha, 1885-1887).

Basil II., called Temny ("the Blind") (1415-1462), son of the preceding, succeeded his father as grand-duke of Moscow in 1425. He was a man of small ability and unusual timidity, though not without tenacity of purpose. Nevertheless, during his reign Moscow steadily increased in power, as if to show that the personality of the grand-dukes had become quite a subordinate factor in its development. In 1430 Basil was seized by his uncle, George of Halicz, and sent a prisoner to Kostroma; but the nation, dissatisfied with George, released Basil and in 1433 he returned in triumph to Moscow. George, however, took the field against him and Basil fled to Novgorod. On the death of George, Basil was at constant variance with George's children, one of whom, Basil, he had blinded; but in 1445 the grand-duke fell into the hands of blind Basil's brother, Shemyak, and was himself deprived of his sight and banished to Uglich (1445). The clergy and people,

however, being devoted to the grand-duke, assisted him not only to recover his throne a second time, but to put Shemyak to flight, and to seize Halicz, his patrimony. During the remainder of Basil II.'s reign he slowly and unobtrusively added district after district to the grand-duchy of Muscovy, so that, in fine, only the republics of Novgorod and Pskov and the principalities of Tver and Vereya remained independent of Moscow. Yet all this time the realm was overrun continually by the Tatars and Lithuanians, and suffered severely from their depredations. Basil's reign saw the foundation of the Solovetsk monastery and the rise of the khanate of the Crimea. In 1448 the north Russian Church became virtually independent of the patriarchal see of Constantinople by adopting the practice of selecting its metropolitan from among native priests and prelates exclusively.

See S. M. Solovev, *History of Russia* (Russ.), (Petersburg, 1895).

BASIL III., IVANOVICH (1479-1533), tsar of Muscovy, son of Ivan III. and Sophia Palaeologa, succeeded his father in 1505. A crafty prince, with all the tenacity of his race, Basil succeeded in incorporating with Muscovy the last remnants of the ancient independent principalities, by accusing the princes of Ryazan and Syeversk of conspiracy against him, seizing their persons, and annexing their domains (1517-1523). Seven years earlier (24th of January 1510) the last free republic of old Russia, Pskov, was deprived of its charter and assembly-bell, which were sent to Moscow, and tsarish governors were appointed to rule it. Basil also took advantage of the difficult position of Sigismund of Poland to capture Smolensk, the great eastern fortress of Poland (1512), chiefly through the aid of the rebel Lithuanian, Prince Michael Glinsky, who provided him with artillery and engineers from western Europe. The loss of Smolensk was the first serious injury inflicted by Muscovy on Poland and only the exigencies of Sigismund compelled him to acquiesce in its surrender (1522). Equally successful, on the whole, was Basil against the Tatars. Although in 1519 he was obliged to buy off the khan of the Crimea, Mahommed Girai, under the very walls of Moscow, towards the end of his reign he established the Russian influence on the Volga, and in 1530 placed the pretender Elanyei on the throne of Kazan. Basil was the first grand-duke of Moscow who adopted the title of tsar and the doubleheaded eagle of the East Roman empire. By his second wife, Helena Glinska, whom he married in 1526, Basil had a son Ivan, who succeeded him as Ivan IV.

See Sigismund Herberstain, *Rerum Moscoviticarum Commentarii* (Vienna, 1549); P. A. Byelov, *Russian History Previous to the Reforms of Peter the Great* (Russ.), (Petersburg, 1895); E. I. Kashprovsky, *The War of Basil III. with Sigismund I.* (Russ.), (Nyezhin, 1899).

Basil IV., Shuisky (d. 1612), tsar of Muscovy, was during the reigns of Theodore I. and Boris Godunov, one of the leading boyars of Muscovy. It was he who, in obedience to the secret orders of Tsar Boris, went to Uglich to inquire into the cause of the death of Demetrius, the infant son of Ivan the Terrible, who had been murdered there by the agents of Boris. Shuisky obsequiously reported that it was a case of suicide; yet, on the death of Boris and the accession of his son Theodore II., the false boyar, in order to gain favour with the first false Demetrius, went back upon his own words and recognized the pretender as the real Demetrius, thus bringing about the assassination of the young Theodore. Shuisky then plotted against the false Demetrius and procured his death (May 1606) also by publicly confessing that the real Demetrius had been indeed slain and that the reigning tsar was an impostor. This was the viler in him as the pseudo-Demetrius had already forgiven him one conspiracy. Shuisky's adherents thereupon proclaimed him tsar (19th of May 1606). He reigned till the 19th of July 1610, but was never generally recognized. Even in Moscow itself he had little or no authority, and was only not deposed by the dominant boyars because they had none to put in his place. Only the popularity of his heroic cousin, Prince Michael Skopin-Shuisky, who led his armies and fought his battles for him, and soldiers from Sweden, whose assistance he purchased by a disgraceful cession of Russian territory, kept him for a time on his unstable throne. In 1610 he was deposed, made a monk, and finally carried off as a trophy by the Polish grand hetman, Stanislaus Zolkiewski. He died at Warsaw in 1612.

See D. I. Ilovaisky, *The Troubled Period of the Muscovite Realm* (Russ.), (Moscow, 1894); S. I. Platonov, *Sketches of the Great Anarchy in the Realm of Moscow* (Petersburg, 1899); D. V. Tsvyeltev, *Tsar Vasily Shuisky* (Russ.), (Warsaw, 1901-1903); R. Nisbet Bain, *Slavonic Europe*, ch. viii. (Cambridge, 1907).

(R. N. B.)

BASILIAN MONKS, those who follow the rule of Basil the Great. The chief importance of the monastic rule and institute of St Basil lies in the fact that to this day his reconstruction of the monastic life is the basis of the monasticism of the Greek and Slavonic Churches, though the monks do not call themselves Basilians. St Basil's claim to the authorship of the Rules and other ascetical writings that go under his name, has been questioned; but the tendency now is to recognize as his at any rate the two sets of Rules. Probably the truest idea of his monastic system may be derived from a correspondence between him and St Gregory Nazianzen at the beginning of his monastic life, the chief portions whereof are translated by Newman in the *Church of the Fathers*, "Basil and Gregory," §§ 4, 5. On leaving Athens Basil visited the monasteries of Egypt and Palestine; in the latter country and in Syria the monastic life tended to become more and more eremitical and to run to great extravagances in the matter of bodily austerities (see Monasticism). When (c. 360) Basil formed his monastery in the neighbourhood of Neocaesarea in Pontus, he deliberately set himself against these tendencies. He declared that the cenobitical life is superior to the eremitical; that fasting and austerities should not interfere with prayer or work;

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that work should form an integral part of the monastic life, not merely as an occupation, but for its own sake and in order to do good to others; and therefore that monasteries should be near towns. All this was a new departure in monachism. The life St Basil established was strictly cenobitical, with common prayer seven times a day, common work, common meals. It was, in spite of the new ideas, an austere life, of the kind called contemplative, given up to prayer, the reading of the Scriptures and heavy field-work. The so-called Rules (the Longer and the Shorter) are catechisms of the spiritual life rather than a body of regulations for the corporate working of a community, such as is now understood by a monastic rule. Apparently no vows were taken, but obedience, personal poverty, chastity, self-denial, and the other monastic virtues were strongly enforced, and a monk was not free to abandon the monastic life. A novitiate had to be passed, and young boys were to be educated in the monastery, but were not expected to become monks.

St Basil's influence, and the greater suitability of his institute to European ideas, ensured the propagation of Basilian monachism; and Sozomen says that in Cappadocia and the neighbouring provinces there were no hermits but only cenobites. However, the eastern hankering after the eremitical life long survived, and it was only by dint of legislation, both ecclesiastical (council of Chalcedon) and civil (Justinian Code), that the Basilian cenobitic form of monasticism came to prevail throughout the Greek-speaking lands, though the eremitical forms have always maintained themselves.

Greek monachism underwent no development or change for four centuries, except the vicissitudes inevitable in all things human, which in monasticism assume the form of alternations of relaxation and revival. The second half of the 8th century seems to have been a time of very general decadence; but about the year 800 Theodore, destined to be the only other creative name in Greek monachism, became abbot of the monastery of the Studium in Constantinople. He set himself to reform his monastery and restore St Basil's spirit in its primitive vigour. But to effect this, and to give permanence to the reformation, he saw that there was need of a more practical code of laws to regulate the details of the daily life, as a supplement to St Basil's Rules. He therefore drew up constitutions, afterwards codified (see Migne, *Patrol. Graec.* xcix., 1704-1757), which became the norm of the life at the Studium monastery, and gradually spread thence to the monasteries of the rest of the Greek empire. Thus to this day the Rules of Basil and the Constitutions of Theodore the Studite, along with the canons of the Councils, constitute the chief part of Greek and Russian monastic law.

The spirit of Greek monachism, as regenerated by Theodore, may best be gathered from his Letters, Discourses and Testament. [1] Under the abbot were several officials to superintend the various departments; the liturgical services in the church took up a considerable portion of the day, but Theodore seems to have made no attempt to revive the early practice of the Studium in this matter (see Acoemeti); the rest of the time was divided between reading and work; the latter included the chief handicrafts, for the monks, only ten in number, when Theodore became abbot, increased under his rule to over a thousand. One kind of work practised with great zeal and success by the Studite monks, was the copying of manuscripts, so that to them and to the schools that went forth from them we owe a great number of existing Greek MSS. and the preservation of many works of classical and ecclesiastical antiquity. In addition to this, literary and theological studies were pursued, and the mysticism of pseudo-Dionysius was cultivated. The life, though simple and self-denying and hard, was not of extreme austerity. There was a division of the monks into two classes, similar to the division in vogue in later time in the West into choir-monks and lay-brothers. The life of the choir-monks was predominantly contemplative, being taken up with the church services and private prayer and study; the lay-brothers carried on the various trades and external works. There is little or no evidence of works of charity outside the monastery being undertaken by Studite monks. Strict personal poverty was enforced, and all were encouraged to approach confession and communion frequently. Vows had been imposed on monks by the council of Chalcedon (451). The picture of Studite life is the picture of normal Greek and Slavonic monachism to this day.

During the middle ages the centre of Greek monachism shifted from Constantinople to Mount Athos. The first monastery to be founded here was that of St Athanasius (c. 960), and in the course of the next three or four centuries monasteries in great numbers—Greek, Slavonic and one Latin—were established on Mount Athos, some twenty of which still survive.

Basilian monachism spread from Greece to Italy and Russia. Rufinus had translated St Basil's Rules into Latin (c. 400) and they became the rule of life in certain Italian monasteries. They were known to St Benedict, who refers his monks to "the Rule of our holy Father Basil,"—indeed St Benedict owed more of the ground-ideas of his Rule to St Basil than to any other monastic legislator. In the 6th and 7th centuries there appear to have been Greek monasteries in Rome and south Italy and especially in Sicily. But during the course of the 8th, 9th and 10th centuries crowds of fugitives poured into southern Italy from Greece and Sicily, under stress of the Saracenic, Arab and other invasions; and from the middle of the 9th century Basilian monasteries, peopled by Greek-speaking monks, were established in great numbers in Calabria and spread northwards as far as Rome. Some of them existed on into the 18th century, but the only survivor now is the monastery founded by St Nilus (c. 1000) at Grottaferrata in the Alban Hills. Professor Kirsopp Lake has (1903) written four valuable articles (Journal of Theological Studies, iv., v.) on "The Greek monasteries of South Italy"; he deals in detail with their scriptoria and the dispersal of their libraries, a matter of much interest, in that some of the chief collections of Greek MSS. in western Europe—as the Bessarion at Venice and a great number at the Vatican —come from the spoils of these Italian Basilian houses.

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Of much greater importance was the importation of Basilian monachism into Russia, for it thereby became the norm of monachism for all the Slavonic lands. Greek monks played a considerable part in the evangelization of the Slavs, and the first Russian monastery was founded at Kiev (c. 1050) by a monk from Mount Athos. The monastic institute had a great development in Russia, and at the present day there are in the Russian empire some 400 monasteries of men and 100 of women, many of which support hospitals, almshouses and schools. In the other Slavonic lands there are a considerable number of monasteries, as also in Greece itself, while in the Turkish dominions there are no fewer than 100 Greek monasteries. The monasteries are of three kinds: cenobia proper, wherein full monastic common life, with personal poverty, is observed; others called idiorrhythmic, wherein the monks are allowed the use of their private means and lead a generally mitigated and free kind of monastic life; and the lauras, wherein the life is semieremitical. Greek and Slavonic monks wear a black habit. The visits of Western scholars in modern times to Greek monasteries in search of MSS.—notably to St Catherine's on Mount Sinai, and to Mount Athos-has directed much attention to contemporary Greek monachism, and the accounts of these expeditions commonly contain descriptions, more or less sympathetic and intelligent, of the present-day life of Greek monks. The first such account was Robert Curzon's in parts iii. (1834) and iv. (1837) of the Monasteries of the Levant; the most recent in English is Athelstan Riley's Athos (1887). The life is mainly given up to devotional contemplative exercises; the church services are of extreme length; intellectual study is little cultivated; manual labour has almost disappeared; there are many hermits on Athos (q.v.).

The ecclesiastical importance of the monks in the various branches of the Orthodox Church lies in this, that as bishops must be celibate, whereas the parochial clergy must be married, the bishops are all recruited from the monks. But besides this they have been a strong spiritual and religious influence, as is recognized even by those who have scant sympathy with monastic ideals (see Harnack, *What is Christianity?* Lect. xiii., end).

Outside the Orthodox Church are some small congregations of Uniat Basilians. Besides Grottaferrata, there are Catholic Basilian monasteries in Poland, Hungary, Galicia, Rumania; and among the Melchites or Uniat Syrians.

There have been Basilian nuns from the beginning, St Macrina, St Basil's sister, having established a nunnery which was under his direction. The nuns are devoted to a purely contemplative life, and in Russia, where there are about a hundred nunneries, they are not allowed to take final vows until the age of sixty. They are very numerous throughout the East.

Authorities.—In addition to the authorities for different portions of the subject-matter named in the course of this article, may be mentioned, on St Basil and his Rules, Montalembert, *Monks of the West*, second part of bk. ii., and the chapter on St Basil in James O. Hannay's *Spirit and Origin of Christian Monasticism* (1903). On the history and spirit of Basilian Monachism, Helyot, *Hist. des Ordres Religieux*, i. (1714); Heimbucher, *Orden und Kongregationen* (1907), i., § 11; Abbé Marin, *Les Moines de Constantinople* (1897); Karl Holl, *Enthusiasmus und Bussgewalt beim griechischen Mönchtum* (1898); Otto Zöckler, *Askese und Mönchtum*, pp. 285-309 (1897). For general information see Wetzer und Welte, *Kirchenlexicon* (ed. ii.), art. "Basilianer," and Herzog-Hauck, *Realencyklopädie* (ed. iii.), in articles "Mönchtum," "Orientalische Kirche," and "Athosberg," where copious references will be found.

(E. C. B.)

[1] Specimen passages, and also a general picture of the life, will be found in Miss Alice Gardner's *Theodore of Studium*, ch. v.

BASILICA, a word of Greek origin (see below), frequently used in Latin literature and inscriptions to denote a large covered building that could accommodate a considerable number of people. Strictly speaking, a basilica was a building of this kind situated near the business centre of a city and arranged for the convenience of merchants, litigants and persons engaged on the public service; but in a derived sense the word might be used for any large structure wherever situated, such as a hall of audience (Vitruv. vi. 5. 2) or a covered promenade (St Jerome, *Ep.* 46) in a private palace; a riding school (*basilica equestris exercitatoria, C.I.L.* vii. 965); a market or store for flowers (*basilica floscellaria* [*Notitia*]), or other kinds of goods (*basilica vestiaria, C.I.L.* viii. 20156), or a hall of meeting for a religious body. In this derived sense the word came naturally to be applied to the extensive buildings used for Christian worship in the age of Constantine and his successors.

The question whether this word conveyed to the ancients any special architectural significance is a difficult one, and some writers hold that the name betokened only the use of the building, others that it suggested also a certain form. Our knowledge of the ancient basilica as a civil structure is derived primarily from Vitruvius, and we learn about it also from existing remains and from incidental notices in classical writers and in inscriptions. If we review all the evidence we are led to the conclusion that there did exist a normal form of the building, though many examples deviated therefrom. This normal form we shall understand if we consider the essential character of the building in the light of what Vitruvius tells us of it.

Vitruvius treats the basilica in close connexion with the forum, to which in his view it is an adjunct. In the earlier classical times, both in Greece and Italy, business of every kind, political, commercial and legal, was transacted in the open forum, and there also were presented shows and pageants. When business increased and the numbers of the population were multiplied, it was found convenient to provide additional accommodation for these purposes. Theatres and

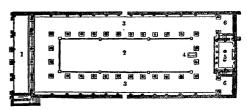
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amphitheatres took the performances and games. Markets provided for those that bought and sold, while for business of more important kinds accommodation could be secured by laying out new agorae or fora in the immediate vicinity of the old. At Rome this was done by means of the so-called imperial fora, the latest and most splendid of which was that of Trajan. These fora corresponded to the later Greek or Hellenistic agora, which, as Vitruvius tells us, was of regular form and surrounded by colonnades in two stories, and they had the practical use of relieving the pressure on the original forum (Cic., ad Att., iv. 16). The basilica was a structure intended for the same purposes. It was to all intents and purposes a covered forum, and in its normal form was constituted by an arrangement of colonnades in two stories round a rectangular space, that was not, like the Greek agora, open, but covered with a roof. Vitruvius writes of it as frequented by merchants, who would find in it shelter and quiet for the transaction of their business. Legal tribunals were also set up in it, though it is a mistake to suppose the basilica a mere law court. The magistrates who presided over these tribunals had sometimes platforms, curved or rectangular in plan, provided as part of the permanent fittings of the edifice.

According to Vitruvius (v. 1.4, cf. also vi. 3.9) the building is to be in plan a rectangle, not more than three times nor less than twice as long as it is broad. If the site oblige the length to be greater, the surplus is to be cut off to form what he calls chalcidica, by which must be meant open vestibules. The interior is divided into a central space and side aisles one-third the width of this. The ground plan of the basilica at Pompeii (fig. 1) illustrates this description, though the superstructure did not correspond to the Vitruvian scheme. The columns between nave and aisles, Vitruvius proceeds, are the same height as the width of the latter, and the aisle is covered with a flat roof forming a terrace (contignatio) on which people can walk. Surrounding this on the inner side is a breastwork or parapet (pluteum), which would conceal these promenaders from the view of the merchants in the basilica below. On the top of this parapet stood the upper row of columns, three-quarters as high as the lower ones. The spaces between these columns, above the top of the pluteum, would be left free for the admission of light to the central space, which was covered by a roof called by Vitruvius (v. 1. 6) mediana testudo. Nothing is said about a permanent tribunal or about an apse.

How far existing remains agree with the Vitruvian scheme will be seen as we proceed. We have now to consider the derivation of the word "basilica," the history of the form of building, and its architectural scheme as represented in actual relics.

The word "basilica" is a Latinized form of the Greek adjective βασιλική, "royal," and some feminine substantive, such as domus, or stoa, must be Fig. 1.—Basilica at Pompeii. 1, Portico understood with it. A certain building at Athens, (Chalcidicum); 2, hall of basilica; 3, aisles; 4, wherein the ἄρχων βασιλεύς transacted business and altar; 5, tribunal; 6, offices. the court of the Areopagus sometimes assembled, was



called $\beta\alpha\sigma(\lambda\epsilon_i)$ or σ to α , and it is an accredited theory, though it is by no means proved, that we have here the origin of the later basilica. It is difficult to see why this was called "royal" except for some special but accidental reason such as can in this case be divined. There are other instances in which a term that becomes specific has been derived from some one specimen accidentally named. "Labyrinth" is one case in point, and "basilica" may be another. It is true that we do not know what was the shape of the King Archon's portico, but the same name ($\beta\alpha\sigma$ ίλειος στοά) was given to the grand structure erected by Herod the Great along the southern edge of the Temple platform at Jerusalem, and this corresponded to the Vitruvian scheme of a columned fabric, with nave and aisles and clerestory lighting.

Whether the Roman basilicas, with which we are chiefly concerned, were derived directly from the Athenian example, or mediately from this through structures of the same kind erected in the later Greek cities, is hard to say. We should naturally look in that direction for the prototypes of the Roman basilicas, but as a fact we are not informed of any very early basilicas in these cities. The earliest we know of is the existing basilica at Pompeii, that may date back into the 2nd century B.C., whereas basilicas made their appearance at Rome nearly at the beginning of that century. The first was erected by M. Porcius Cato, the censor, in 184 B.C., and was called after his name Basilica Porcia. Cato had recently visited Athens and had been struck by the beauty of the city, so that it is quite possible that the importation was direct.

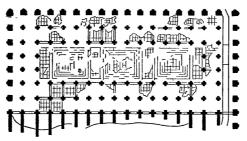


Fig. 2.—Plan of Basilica Julia, Rome. (From Baedeker's Central Italy, by permission of Karl Baedeker.)

Rome soon obtained other basilicas, of which the important Basilica Fulvia-Aemilia came next in point of time, till by the age of Augustus there were at least five in the immediate neighbourhood of the forum, the latest and most extensive being the Basilica Julia, which ran parallel to its southern side, and is shown in plan in fig. 2. The great Basilica Ulpia was built by Trajan in connexion with his forum about A.D. 112, and a fragment of the Capitoline plan of Rome gives the scheme of it (fig. 3), while an attempted restoration of



Fig. 3.—Plan of Basilica Ulpia, from Capitoline plan of Rome.

the interior by Canina is shown in fig. 4. The vaulted basilica of Maxentius or Constantine on the Via Sacra dates from the beginning of the 4th century, and fig. 5 gives the section of it. The number of public basilicas we read of at Rome alone amounts to about a score, while many private basilicas, for business or recreation, must also have existed, that in the palace of Domitian on the Palatine being the best known. In provincial cities in Italy, and indeed all over the empire, basilicas were almost universal, and in the case of Italy we have proof of this as early as the date of the death of Augustus, for Suetonius (*Aug.* 100) tells us that the body of that emperor, when it was brought from Nola in Campania to Rome, rested "*in basilica cujusque oppidi.*"

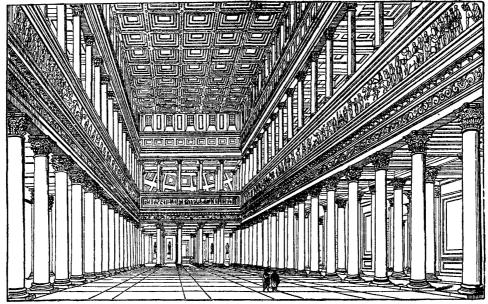


Fig. 4.—Interior view of Trajan's Basilica (Basilica Ulpia), as restored by Canina.

As regards existing examples, neither in the peninsula nor the provinces can it be said that these give any adequate idea of the former abundance and wide distribution of basilicas. Northern Africa contributes one or two examples, and a plan is given of that at Timgad (fig. 6). The Gallic basilicas, which must have been very numerous, are represented only by the noble structure at Trier (Trèves), which is now a single vast hall 180 ft. long, 90 ft. wide and 100 ft. high, commanded at one end by a spacious apse. There is reason to conjecture that this is the basilica erected by Constantine, and some authorities believe that originally it had internal colonnades. In England basilicas remain in part at Silchester (fig. 7), Uriconium (Wroxeter), Chester (?) and Lincoln, while three others are mentioned in inscriptions (*C.I.L.* vii. 287, 445, 965).

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A comparison of the plans of existing basilicas shows considerable variety in form. Some basilicas (Julia, Ulpia, Pompeii) have the central space surrounded by galleries supported on columns or piers, according to the normal scheme, and the newly excavated Basilica Aemilia, north of the Roman forum, agrees with these. In some North African examples, in the palace basilica of Domitian, and at Silchester, there are colonnades down the long sides but not across the ends. Others (Trier [?], Timgad) have no interior divisions. One (Maxentius) is entirely a vaulted structure and in form resembles the great halls of the Roman Thermae. At Pompeii, Timgad and Silchester, there are fixed tribunals, while vaulted apses that may have contained tribunals occur in the basilica of Maxentius. In the Basilica Julia there was no tribunal at all, though we know that the building was regularly used for the centumviral court (Quint. xii. 5. 6), and the same was the case in the Ulpia, for the semicircular projection at the end shown on the Capitoline-plan, was not a vaulted apse and was evidently distinct from the basilica.

In view of the above it might be questioned whether it is safe to speak of a normal form of the basilica, but when we consider the vast number of basilicas that have perished compared to the few that have survived, and the fact that the origins and traditions of the building show it to have been, as Vitruvius describes it, essentially a columned structure, there is ample justification for the view expressed earlier in this



Fig. 5.—Section of the Basilica of Maxentius or

article. There can be little doubt that the earlier Constantine (Temple of Peace). basilicas, and the majority of basilicas taken as a

whole, had a central space with galleries, generally in two stories, round it, and some arrangement for clerestory lighting. Later basilicas might vary in architectural scheme, while affording the same sort of accommodation as the older ones.

The relation of the civil basilica of the Romans to the Christian church has been extensively discussed, and the reader will find the controversy ably summarized in Kraus's Geschichte der christlichen Kunst, bk. 5. There is nothing remarkable in the fact that a large church was called a basilica, for the term was applied, as we have seen, to structures of many kinds, and we even find "basilica" used for the meeting-place of a pagan religious association (Röm. Mitt. 1891, p. 109). The similarity in some respects of the early Christian churches to the normal form of the columned basilica is so striking, that we can understand how the theory was once held that Christian churches were the actual civil basilicas turned over from secular to religious uses. There is no evidence for this in the case of public basilicas, and it stands to reason that the demands on these for secular purposes would remain the same whether Christianity were the religion of the empire or not. Moreover, though there are one or two civil basilicas that resemble churches, the latter differ in some most important respects from the form of the basilica that we have recognized as normal. The early Christian basilicas, at any rate in the west, had very seldom, if ever, galleries over the side aisles, and their interior is always dominated by the semidome of an apse that terminates the central nave, whereas, with the doubtful exception of Silchester (Archaeologia, liii. 549), there is no instance known of a vaulted apse in a columned civil basilica of the normal kind.

When buildings were first expressly erected for Christian worship, in the 3rd or perhaps already in the 2nd century A.D. (Leclercy, Manuel, ch. iii. "Les édifices chrétiens avant la paix de l'église"), they probably took the form of an oblong interior terminated by an apse. After the time of Constantine, when the numbers of the faithful were enormously increased, side aisles were added, and in this way the structure came to assume an appearance similar to that of the civil basilica. A striking confirmation of this view has recently come to light at S. Saba on the Aventine at Rome, where a small and very early church, without aisles, has been discovered beneath the floor of the present basilica.

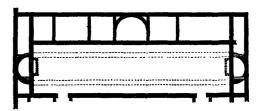
Forum

Fig. 6.—Plan of Basilica adjoining the Forum of the Roman city of Timgad, in North Africa. (From Gsell's Monuments antiques de l'Algerie, by permission of A. Fontemoing.)

There are, on the other hand, instances in which private basilicas in palaces and mansions were handed over to the Christians for sacred uses. We know that to have been the case with the basilicas of S. Croce in Gerusalemme and S. Maria Maggiore at Rome, which

originated in the halls of the Sessorian and Liberian palaces respectively, granted by Constantine to the Christians. We may adduce also as evidence of the same practice a passage in bk. x. ch. 71 of the theological romance known as The Recognitions of Clement, probably dating from the early half of the 3rd century, in which we are told that Theophilus of Antioch, on his conversion by St Peter, made over "the basilica of his house" for a church. But however this may have been, with, perhaps, the single exception of S. Croce, the existing Christian basilicas were erected from the ground for their sacred purpose. At Rome the columns, friezes and other materials of the desecrated temples and public buildings furnished abundant materials for their construction. The decadence of art is plainly shown by the absence of rudimentary architectural knowledge in these reconstructions. Not only are columns of various heights and diameters made to do duty in the same colonnade, but even different orders stand side by side (e.g. Ionic, Corinthian and Composite at S. Maria in Trastevere); while pilasters assume a horizontal position and serve as entablatures, as at S. Lorenzo fuori le Mura. There being no such quarry of ready-worked materials at Ravenna, the noble basilicas of that city are free from these defects, and exhibit greater unity of design and harmony of proportions.

An early Christian basilica may be thus described in its main features:—A porch supported on pillars (as at S. Clemente) gave admission into an open court or atrium, surrounded by a colonnaded cloister (S. Clemente, Old St Peter's, S. Ambrogio at Milan, Parenzo). In the centre of the court stood a cistern or fountain (cantharus, phiale), for drinking and ablutions. In close contiguity to the atrium, often to the west, was the baptistery, usually octagonal (Parenzo). Fig. 7.—Plan of Basilica adjoining the Forum of The church was entered through a long narrow porch the Roman city at Silchester, Hants. (From (narthex), beyond which penitents, or those under Archaeologia, vol. liii.) ecclesiastical censure, were forbidden to pass. Three



or more lofty doorways, according to the number of the aisles, set in marble cases, gave admission to the church. The doors themselves were of rich wood, elaborately carved with scriptural subjects (S. Sabina on the Aventine), or of bronze similarly adorned and often gilt. Magnificent curtains, frequently embroidered with sacred figures or scenes, closed the entrance, keeping out the heat of summer and the cold of winter.

The interior consisted of a long and wide nave, sometimes as much as 80 ft. across, terminating in a semicircular apse, with one or sometimes (St Paul's, Old St Peter's, St John Lateran) two

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aisles on each side, separated by colonnades of marble pillars supporting horizontal entablatures (Old St Peter's, S. Maria Maggiore, S. Lorenzo) or arches (St Paul's, S. Agnese, S. Clemente, the two basilicas of S. Apollinare at Ravenna). Above the pillars the clerestory wall rose to a great height, pierced in its upper part by a range of plain round-headed windows. The space between the windows and the colonnade (the later triforium-space) was usually decorated with a series of mosaic pictures in panels. The colonnades sometimes extended quite to the end of the church (the Ravenna basilicas), sometimes ceased some little distance from the end, thus admitting the formation of a transverse aisle or transept (St Paul's, Old St Peter's, St John Lateran). Where this transept occurred it was divided from the nave by a wide arch, the face and soffit of which were richly decorated with mosaics. Over the crown of the arch we often find a bust of Christ or the holy lamb lying upon the altar, and, on either side, the evangelistic symbols, the seven candlesticks and the twenty-four elders. Another arch spanned the semicircular apse, in which the church always terminated. From Carolingian times this was designated the arch of triumph, because a cross was suspended from it.

The conch or semi-dome that covered the apse was always covered with mosaic pictures, usually paintings of our Lord, either seated or standing, with St Peter and St Paul, and other apostles and saints, on either hand. The beams of the roof were sometimes concealed by a flat ceiling, richly carved and gilt. The altar, standing in the centre of the chord of the apse on a raised platform reached by flights of steps, was rendered conspicuous by a lofty canopy supported by marble pillars (ciborium, baldacchino), from which depended curtains of the richest materials. Beneath the altar was the confessio, a subterranean chapel, containing the body of the patron saint, and relics of holy persons. This was approached by descending flights of steps from the nave or aisles. The

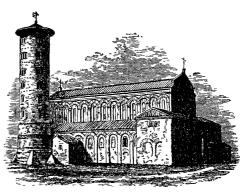


Fig. 8.—S. Apollinare in Classe, Ravenna.

confessio in some cases reproduced the original place of interment of the patron saint, either in a catacomb-chapel or in an ordinary grave, and thus formed the sacred nucleus round which the church arose. We have good examples of this arrangement at St Peter's and St Paul's at Rome, and S. Apollinare in Classe, Ravenna. It was copied in the original cathedral of Canterbury. The bishop or officiating presbyter advanced from his seat in the centre of the semicircle of the apse to the altar, and celebrated the Eucharist with his face to the congregation below. At the foot of the altar steps a raised platform, occupying the upper portion of the nave, formed a choir for the singers, readers and other inferior clergy. This oblong space was separated from the aisles and from the western portion of the nave by low marble walls or railings (cancelli). From these walls projected ambones or pulpits with desks, also of marble, ascended by steps.

The exterior of the basilicas was usually of an extreme plainness. The vast brick walls were unrelieved by ornament, save occasionally by arcading as at S. Apollinare in Classe, Ravenna, and had no compensating grace of outline or beauty of proportion. An exception was made for the entrance front, which was sometimes covered with plates of marble mosaics or painted stucco (Old St Peter's, S. Lorenzo). But in spite of any decorations the external effect of a basilica must always have been heavy and unattractive. S. Apollinare in Classe at Ravenna (fig. 8) affords a [v.03 p.0474] typical example. The campanile is a later addition. Within, apart from the beautiful mosaic decoration, a fine effect was produced by the arch of triumph and the apse, which terminated the nave and dominated the whole vast space of the interior.

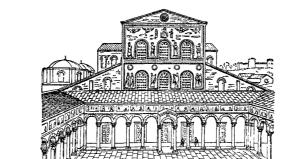


Fig. 9.—Façade of old St Peter's, Rome.

To pass from general description to individual churches, the first place must be given, as the earliest and grandest examples of the type, to the world-famous Roman basilicas; those of St Peter, St Paul and St John Lateran, "omnium urbis et orbis ecclesiarum mater et caput." It is true that no one of these exists in its original form, Old St Peter's having been entirely removed in the 16th century to make room for its magnificent successor; and both St Paul's and St John Lateran having been greatly injured by fire, and the last named being so completely modernized as to have lost all interest. Of the two former, however, we possess drawings and plans and minute descriptions, which give an accurate conception of the original buildings. To commence with St Peter's, from the illustrations annexed (figs. 9, 10, 11) it will be seen that the church was entered through a vast colonnaded atrium, 212 ft. by 235 ft., with a fountain in the centre,—the atrium

being preceded by a porch mounted by a noble flight of steps. The church was 212 ft. wide by 380 ft. long; the nave, 80 ft. in width, was six steps lower than the side aisles, of which there were two on each side. The four dividing colonnades were each of twenty-two Corinthian columns. Those next the nave supported horizontal entablatures. The inner colonnades bore arches, with a second clerestory. The main clerestory walls were divided into two rows of square panels containing mosaics, and had windows above. The transept projected beyond the body of the church,—a very unusual arrangement. The apse, of remarkably small dimensions, was screened off by a double row of twelve wreathed columns of Parian marble. The pontifical chair was placed in the centre of the curve of the apse, on a platform raised several steps above the presbytery. To the right and left the seats of the cardinals followed the line of the apse. At the centre of the chord stood the high altar beneath a ciborium, resting on four pillars of porphyry. Beneath the altar was the subterranean chapel, the centre of the devotion of so large a portion of the Christian world, believed to contain the remains of St Peter; a vaulted crypt ran round the foundation wall of the apse in Fig. 10.—Ground-Plan of the which many of the popes were buried. The roof showed its naked original Basilica of St Peter's beams and rafters.

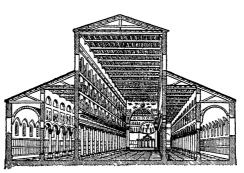
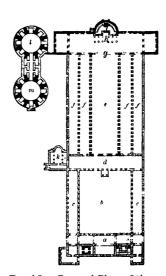


Fig. 11.—Sectional view of the old Basilica of St Peter, before its destruction in the 16th century.



at Rome. a, Porch. b, Atrium. c, Cloisters. d, Narthex. e, Nave. f, f, Aisles, g, Bema. h, Altar, protected by a double screen. i, Bishop's throne in centre of the apse. k, Sacristy. I, Tomb of Honorius. m, Church of St Andrew.

The basilica of St Paul without the walls, dedicated 324 A.D., rebuilt 388-423, remained in a sadly neglected state, but substantially unaltered, till the disastrous fire of 1823, which reduced the nave to a calcined ruin. Its plan and dimensions (figs. 12, 13) were almost identical with those of St Peter's.

The only parts of the modernized five-aisled basilica of St John Lateran (of which we have a plan in its original state, Agincourt, pl. lxxiii. No. 22) which retain any interest, are the double-vaulted aisle which runs round the apse, a most unusual arrangement, and the baptistery. The latter is an octagonal building standing some little distance from the basilica to the south. Its roof is supported by a double range of columns, one above the other, encircling the baptismal basin sunk below the floor.

Of the three-aisled basilicas the best example is the Liberian or S. Maria Maggiore dedicated 365, and reconstructed 432 A.D. Its internal length to the chord of the apse is 250 ft. by 100 ft. in breadth. The Ionic pillars of grey granite, uniform in style, twenty on each side, form a colonnade of great dignity and beauty, unfortunately broken towards the east by intrusive arches opening into chapels. The clerestory, though modern, is excellent in style and arrangement. Corinthian pilasters divide the windows, beneath which are very aisles. d, Altar. e, remarkable mosaic pictures of subjects from Old Testament history, generally Bema. f, Apse. supposed to date from the pontificate of Sixtus III., 432-440. The face of the

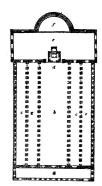


Fig. 12.—Ground-Plan of St. Paul's. Rome, before its destruction by a. Narthex. b. Nave. c, c, Side

arch of triumph presents also a series of mosaics illustrative of the infancy of our Lord, of great value in the history of art. The apse is of later date, reconstructed by Paschal I. in 818.

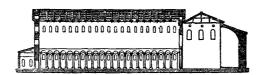


Fig. 13.—Section of the Basilica of St Paul, Rome.

Of the remaining Roman basilicas that of S. Sabina on the Aventine is of special interest as its interior, dating from about A.D. 430, has preserved more of the primitive aspect than any other. Its carved wooden doors of early Christian date are of unique value, and in the spandrils of its inner arcades, upborne by splendid antique Corinthian columns, are some good specimens of

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opus sectile or mosaic of cut marble. The ancient roof is an open one. The basilicas of S. Lorenzo fuori le Mura and S. Agnese deserve particular notice, as exhibiting galleries corresponding to those of the civil basilicas and to the later triforium, carried above the aisles and returned across the entrance end. It is doubtful, however, whether these galleries are part of the original schemes. The architectural history of S. Lorenzo's is curious. When originally constructed in A.D. 432, it consisted of a short nave of six bays, with an internal narthex the whole height of the building. In the 13th century Honorius III. disorientated the church

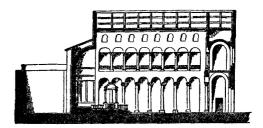


Fig. 14.—Section of Basilica of S. Agnese at

by pulling down the apse and erecting a nave of twelve bays on its site and beyond it, thus converting the original nave into a square-ended choir, the level being much raised, and the magnificent Corinthian columns half buried. As a consequence of the church being thus shifted completely round, the face of the arch of triumph, turned away from the present entrance, but towards the original one, is invested with the usual mosaics (Agincourt, pl. xxviii. Nos. 29, 30, 31). The basilica of S. Agnese, of which we give a section (fig. 14), is a small but interesting building, much like what S. Lorenzo must have been before it was altered.

Though inferior in size, and later in date than most of the basilicas already mentioned, that of S. Clemente is not surpassed in interest by any one of them. This is due to its having retained its original ritual arrangements and church-fittings more perfectly than any other. These fittings have been removed from the earlier church, lying below the existing building, which at some unknown date and for some unrecorded reason was abandoned and filled up with earth, while a new building was erected upon it as a foundation. The Aisle for women. 6. Chorus cantorum. 7. Altar. most probable account is that the earlier church was 8. Gospel-ambo. 9. Epistle-ambo. 10. Confessio. so completely overwhelmed in the ruin of the city in 11. Bishop's throne. 1084, when Robert Guiscard burnt all the public

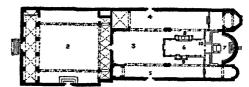


Fig. 15.—Plan of Basilica of S. Clemente in Rome.

1. Porch. 2. Atrium. 3. Nave. 4. Aisle for men. 5.

buildings from the Lateran to the Capitol, that it was found simpler and more convenient to build a new edifice at a higher level than to repair the old one. The annexed plan (fig. 15) and view (fig. 16) show the peculiarities of the existing building. The church is preceded by an atrium, the only perfect example remaining in Rome, in the centre of which is the cantharus or fountain for ablutions. The atrium is entered by a portico made up of earlier fragments very carelessly put together. The chorus cantorum, which occupies about one-third of the nave, is enclosed by a low marble screen, about 3 ft. high, a work of the 9th century, preserved from the old church but newly arranged. The white marble slabs are covered with patterns in low relief, and are decorated with ribbons of glass mosaic of the 13th century. These screen-walls stand quite free of the pillars, leaving a passage between. On the ritual north stands the gospel-ambo, of octagonal form, with a double flight of steps westwards and eastwards. To the west of it stands the great Paschal candlestick, with a spiral shaft, decorated with mosaic. Opposite, to the south, is the epistle-ambo, square in plan, with two marble reading-desks facing east and west, for the reading of the epistle and the gradual respectively. The sanctuary is raised two steps above the choir, from which it is divided by another portion of the same marble screen. The altar stands beneath a lofty ciborium, supported by marble columns, with a canopy on smaller shafts above. It retains the rods and rings for the curtains to run on. Behind the altar, in the centre of the curved line of the apse, is a marble episcopal throne, bearing the monogram of Anastasius who was titular cardinal of this church in 1108. The conch of the apse is inlaid with mosaics of quite the end of the 13th century. The subterranean church, disinterred by the zeal of Father Mullooly, the prior of the adjacent Irish Dominican convent, is supported by columns of very rich marble of various kinds. The aisle walls, as well as those of the narthex, are covered with fresco-paintings of various dates from the 7th to the 11th century, in a marvellous state of preservation (See St Clement, Pope and Martyr, and his Basilica in Rome, by Joseph Mullooly, O.P., Rome, 1873.)

The fullest lists of early Christian basilicas outside Rome are given in Kraus's Realencyklopädie der christlichen Alterthümer, Freiburg i. B., 1882, art. "Basilica," and more recently in Leclercq's Manuel d'archéologie chrétienne, Paris 1907, vol. i. App. i., "Essai de Classement des Principaux Monuments." Only a few characteristic specimens in different regions can here be noticed. In Italy, apart from Rome, the most remarkable basilican churches are the two dedicated to S. Apollinare at Ravenna. They are of smaller dimensions than those of Rome, but the design and proportions are better. The cathedral of this city, a



Fig. 16.—Interior of S. Clemente in Rome.

noble basilica with double aisles, erected by Archbishop Ursus, A.D. 400 (Agincourt, pl. xxiii. No. 21), was unfortunately destroyed on the erection of the present tasteless building. Of the two basilicas of S. Apollinare, the earlier, S. Apollinare Nuovo, originally an Arian church erected by Theodoric, 493-525, measuring 315 ft. in length by 115 ft. in breadth, has a nave 51 ft. wide, separated from the single aisles by colonnades of twenty-two pillars, supporting arches, a small [v.03 p.0476]

prismatic block bearing a sculptured cross intervening with very happy effect between the capital and the arch. Below the windows a continuous band of saintly figures, male on one side and female on the other, advancing in stately procession towards Our Lord and the Virgin Mother respectively, affords one of the most beautiful examples of mosaic ornamentation to be found in any church (fig. 17). The design of the somewhat later and smaller church of S. Apollinare in Classe, A.D. 538-549, measuring 216 ft. by 104 ft., is so similar that they must have proceeded from the same architect (Agincourt, pl lxxiii. No. 35).

The cathedral on the island of Torcello near Venice, originally built in the 7th century, but largely repaired c. A.D. 1000, deserves special attention from the fact that it preserves, in a more perfect state than can be seen elsewhere, the arrangements of the seats in the apse (fig. 18). The bishop's throne occupies the centre of the arc, approached by a steep flight of steps. Six rows of stone benches for the presbyters, rising one above another like the seats in a theatre, follow the curve on either side—the whole being singularly plain and almost rude. The altar stands on a platform; the sanctuary is divided from the nave by a screen of six pillars. The walls of the apse are inlaid with plates of marble. The church is 125 ft. by 75 ft. The narrow aisles are only 7 ft. in width.



Fig. 17.—Arches of S Apollinare Nuovo, Ravenna.

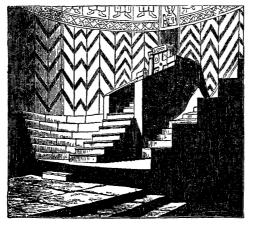


Fig. 18.—Apse of Basilica, Torcello, with Bishop's throne and seats for the clergy. (From a drawing by Lady Palgrave.)

Another very remarkable basilica, less known than it deserves to be, is that of Parenzo in Istria, c. A.D. 542. Few basilicas have sustained so little alteration. From the annexed ground-plan (fig. 19) it will be seen that it retains its atrium and a baptistery, square without, octagonal within, to the west of it. Nine pillars divide each aisle from the nave, some of them borrowed from earlier buildings. The capitals are Byzantine. The choir occupies the three easternmost bays. The apse, as at Torcello, retains the bishop's throne and the bench for the presbyters apparently unaltered. The mosaics are singularly gorgeous, and the apse walls, as at Torcello, are inlaid with rich marble and mother-of-pearl. The dimensions are small—121 ft. by 32 ft. (See *Kunstdenkmale des* österreichischen Kaiserreichs, by Dr G. Heider and others.)

In the Eastern church, though the erection of St Sophia at Constantinople introduced a new type which almost entirely superseded the old one, the basilican form, or as it was then termed dromical, from its shape being that of a race-course (dromos), was originally as much the rule as in the West. The earliest church of which we have any clear account, that of Paulinus at Tyre, A.D. 313-322, described by Eusebius (Hist. Eccl. x. 4 § 37), was evidently basilican, with galleries over the aisles, and had an atrium in front. That erected by Constantine at Jerusalem, on the side of the Holy throne. g. Baptistery. h, Belfry. i, Chapel of St Sepulchre, 333, followed the same plan (Euseb., Vit. Andrew. Const. iii. c. 29), as did the original churches of St

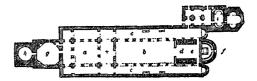


Fig. 19.—Ground-Plan of Cathedral of Parenzo,

a, Cloistered atrium. +, Narthex. b, Nave. c, c, Aisles. d, Chorus cantorum. e, Altar. f, Bishop's

Sophia and of the Apostles at Constantinople. Both these buildings have entirely passed away, but we have an excellent example of an oriental basilica of the same date still standing in the church of the Nativity at Bethlehem, rebuilt by Justinian in the 6th century (fig. 20). Here we find an oblong atrium, a vestibule or narthex, double aisles with Corinthian columns, and a transept, each end of which terminates in an apse, in addition to that in the usual position. Beneath the centre of the transept is the subterranean church of the Nativity (Vogué, Les Églises de la Terre Sainte, p. 46).

Constantinople preserved till recently a basilican church of the 5th century, that of St John Studios, 463, now a ruin. It had a nave and side aisles divided by columns supporting a horizontal entablature, with another order supporting arches forming a gallery above. There was the usual apsidal termination. The chief difference between the Eastern and Roman basilicas is in the galleries. This feature is very rare in the West, and only occurs in some few examples, the antiquity of which is questioned at Rome but never at Ravenna. It is, on the other hand, a

characteristic feature of Eastern churches, the galleries being intended for women, for whom privacy was more studied than in the West (Salzenberg, *Altchrist. Baudenkmale von Constantinople*).

Other basilican churches in the East which deserve notice are those of the monastery of St Catherine on Mt. Sinai built by Justinian, that of Dana between Antioch and Bir of the same date, St Philip at Athens, Bosra in Arabia, Xanthus in Lycia, and the very noble church of St Demetrius at Thessalonica. Views and descriptions of most of these may be found in Texier and Pullan's *Byzantine Architecture*, Couchaud's *Choix d'églises byzantines*, and the works of the count de Vogué. In the Roman province of North Africa there are abundant remains of early Christian churches, and S. Gsell, *Les Monuments antiques de l'Algérie*, has noticed more than 130 examples. Basilicas of strictly early Christian date are not now to be met with in France, Spain or Germany, but the interesting though very plain "Basse Œuvre" at Beauvais may date from Carolingian times, while Germany can show at Michelstadt in the Odenwald an unaltered basilica of the time of Charles the Great. The fine-columned basilica of St Mauritius, near Hildesheim, dates from the 11th century, and the basilican form has been revived in the noble modern basilica at Munich.

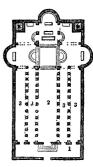


Fig. 20.—Plan of church of the Nativity, Bethlehem. 1, Narthex; 2, nave; 3, 3, aisles.



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Fig. 21.—Plan of early Christian Basilica of about the 4th century at Silchester, Hants. (From Archaeologia, liii.)

England can show more early Christian survivals than France or Germany. In the course of the excavation of the Roman city of Silchester, there was brought to light in 1892 the remains

of a small early Christian basilica dating from the 4th century of which fig. 21 gives the plan (*Archaeologia*, vol. liii.). It will be noted that the apse is flanked by two chambers, of the nature of sacristies, cut off from the rest of the church, and known in ecclesiastical terminology as *prothesis* and *diaconicon*. These features, rare in Italy, are almost universal in the churches of North Africa and Syria. Another existing English basilica of early date is that of Brixworth in Northamptonshire, probably erected by Saxulphus, abbot of Peterborough, *c.* A.D. 680. It consisted of a nave divided from its aisles by quadrangular piers supporting arches turned in Roman brick, with clerestory windows above, and a short chancel terminating in an apse, outside which, as at St Peter's at Rome, ran a circumscribing crypt entered by steps from the chancel. At the west end

was a square porch, the walls of which were carried up later in the form of a tower.

The first church built in England under Roman influence was the original Saxon cathedral of Canterbury. From the annexed ground-plan (fig. 22), as conjecturally restored from Eadmer's description, we see that it was an aisled basilica, with an apse at either end, containing altars standing on raised platforms approached by steps. Beneath the eastern platform was a crypt, or *confessio*, containing relics, "fabricated in the likeness of the confessionary of St Peter at Rome" (Eadmer). The western apse, dedicated to the Blessed Virgin, contained the bishop's throne. From this and other indications Willis thinks that this was the original altar end, the eastern apse being a subsequent addition of Archbishop Odo, c. 950, the church having been thus turned from west to east, as at the already-described basilica of S. Lorenzo at Rome. The choir, as at S. Clemente's, occupied the eastern part of the nave, and like it was probably

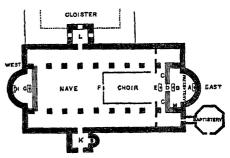


Fig. 22.—Ground-Plan of the original Cathedral at Canterbury, as restored by Willis. A, High altar. B, Altar of our Lord. C, C, Steps to crypt. D, Crypt. E, F, Chorus cantorum. G, Our Lady's altar. H, Bishop's throne. K, South porch with altar. L, North porch containing school. M, Archbishop Odo's tomb.

enclosed by breast-high partitions. There were attached porches to the north and south of the nave. The main entrance of the church was through that to the south. At this *suthdure*, according to Eadmer, "all disputes from the whole kingdom, which could not legally be referred to the king's court, or to the hundreds and counties, received judgment." The northern porch contained a school for the younger clergy.

Authorities.—Vitruvius, De Architectura, v. 1, vi. 3, 9; Huelsen, The Roman Forum (1906); Mau, Pompeii: its Life and Art; C. Lange, Haus und Halle; Canina, Edifizii di Roma Antica; Ciampini, Vetera Monimenta; Seroux d'Agincourt, L'Histoire de l'art par les monumens; Bunsen and Plattner, Beschreibung der Stadt Rom; Gutensohn and Knapp, Basiliken des christlichen Roms; Zestermann, Die antiken u. die christlichen Basiliken; Hübsch, Die altchristlichen Kirchen; Messmer, Über den Ursprung, &c., der Basilica; Letarouilly, Edifices de Rome moderne; Von Quast, Altchristliche Bauwerke von Ravenna; Texier and Pullan, Byzantine Architecture; Vogué, Eglises de la Terre Sainte; Syrie Centrale, Architecture, &c.; Couchaud, Choix d'églises byzantines; Dehio und von Bezold, Die kirchliche Baukunst des Abendlandes; Holtzinger, Die altchristliche Architectur in systematischer Darstellung; Kraus, Geschichte der christlichen Kunst; Leclercq, Manuel d'archéologie chrétienne (Paris, 1907).

(E. V.; G. B. B.)

BASILICA, a code of law, drawn up in the Greek language, with a view to putting an end to the uncertainty which prevailed throughout the East Roman empire in the 9th century as to the authorized sources of law. This uncertainty had been brought about by the conflicting opinions of

the jurists of the 6th century as to the proper interpretation to be given to the legislation of the emperor Justinian, from which had resulted a system of teaching which had deprived that legislation of all authority, and the imperial judges at last were at a loss to know by what rules of law they were to regulate their decisions. An endeavour had been made by the emperor Leo the Isaurian to remedy this evil, but his attempted reform of the law had been rather calculated to increase its uncertainty; and it was reserved for Basil the Macedonian to show himself worthy of the throne, which he had usurped, by purifying the administration of justice and once more reducing the law into an intelligible code. There has been considerable controversy as to the part which the emperor Basil took in framing the new code. There is, however, no doubt that he abrogated in a formal manner the ancient laws, which had fallen into desuetude, and the more probable opinion would seem to be, that he caused a revision to be made of the ancient laws which were to continue in force, and divided them into forty books, and that this code of laws was subsequently enlarged and distributed into sixty books by his son Leo the Philosopher. A further revision of this code is stated to have been made by Constantine Porphyrogenitus, the son and successor of Leo, but this statement rests only on the authority of Theodorus Balsamon, a very learned canonist of the 12th century, who, in his preface to the Nomocanon of Patriarch Photius, cites passages from the Basilica which differ from the text of the code as revised by the emperor Leo. The weight of authority, however, is against any further revision of the code having been made after the formal revision which it underwent in the reign of the emperor Leo, who appointed a commission of jurists under the presidency of Sympathius, the captain of the bodyguard, to revise the work of his father, to which he makes allusion in the first of his Novellae. This latter conclusion is the more probable from the circumstance, that the text of the code, as revised by the emperor Leo, agrees with the citations from the Basilica which occur in the works of Michael Psellus and Michael Attaliates, both of them high dignitaries of the court of Constantinople, who lived a century before Balsamon, and who are silent as to any second revision of the code having taken place in the reign of Constantine Porphyrogenitus, as well as with other citations from the Basilica, which are found in the writings of Mathaeus Blastares and of Constantine Harmenopulus, both of whom wrote shortly after Balsamon, and the latter of whom was far too learned a jurist and too accurate a lawyer to cite any but the official text of the

Authors are not agreed as to the origin of the term Basilica, by which the code of the emperor Leo is now distinguished. The code itself appears to have been originally entitled *The Revision of the Ancient Laws* (ἡ ἀνακάθαρσις τῶν παλαιῶν νόμων); next there came into use the title ἡ ἑξηκοντάβιβλος, derived from the division of the work into sixty books; and finally, before the conclusion of the 10th century, the code came to be designated ὁ βασιλικός, or τὰ βασιλικά, being elliptical forms of ὁ βασιλικὸς νόμος and τὰ βασιλικά νόμιμα, namely the Imperial Law or the Imperial Constitutions. This explanation of the term "Basilica" is more probable than the derivation of it from the name of the father of the emperor Leo, inasmuch as the Byzantine jurists of the 11th and 12th centuries ignored altogether the part which the emperor Basil had taken in initiating the legal reforms, which were completed by his son; besides the name of the father of the emperor Leo was written βασίλειος, from which substantive, according to the genius of the ancient Greek language, the adjective βασιλικός could not well be derived.

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No perfect MS. has been preserved of the text of the Basilica, and the existence of any portion of the code seems to have been ignored by the jurists of western Europe, until the important bearing of it upon the study of the Roman law was brought to their attention by Viglius Zuichemus, in his preface to his edition of the Greek Paraphrase of Theophilus, published in 1533. A century, however, elapsed before an edition of the sixty books of the Basilica, as far as the MSS. then known to exist supplied materials, was published in seven volumes, by Charles Annibal Fabrot, under the patronage of Louis XIII. of France, who assigned an annual stipend of two thousand livres to the editor during its publication, and placed at his disposal the royal printing-press. This edition, although it was a great undertaking and a work of considerable merit, was a very imperfect representation of the original code. A newly-restored and far more complete text of the sixty books of the Basilica was published at Leipzig in six volumes (1833-1870), edited by K. W. E. Heimbach and G. E. Heimbach. It may seem strange that so important a body of law as the Basilica should not have come down to us in its integrity, but a letter has been preserved, which was addressed by Mark the patriarch of Alexandria to Theodoras Balsamon, from which it appears that copies of the Basilica were in the 12th century very scarce, as the patriarch was unable to procure a copy of the work. The great bulk of the code was an obstacle to the multiplication of copies of it, whilst the necessity for them was in a great degree superseded by the publication from time to time of synopses and encheiridia of its contents, composed by the most eminent jurists, of which a very full account will be found in the Histoire au droit byzantin, by the advocate Mortreuil, published in Paris in 1846.

BASILICATA, a territorial division of Italy, now known as the province of Potenza, which formed a part of the ancient Lucania (*q.v.*). It is bounded N. by the province of Foggia, N E. by those of Bari and Lecce, E. by the Gulf of Taranto (for a distance of 24 m.), S. by the province of Cosenza, and W. by the Mediterranean (for a distance of 10 m. only), and by the provinces of Salerno and Avellino. It has an area of 3845 sq. m. The province is as a whole mountainous, the highest point being the Monte Pollino (7325 ft.) on the boundary of the province of Cosenza, while the Monte Vulture, at the N.W. extremity, is an extinct volcano (4365 ft.). It is traversed by five rivers, the Bradano, Basento, Cavone or Salandrella, Agri and Sinni. The longest, the Bradano, is 104 m. in length; all run S.E. or E. into the Gulf of Taranto. The province is traversed from W. to E. by the railway from Naples to Taranto and Brindisi, which passes through Potenza and reaches at Metaponto the line along the E. coast from Taranto to Reggio di Calabria. A branch line runs N.

from Potenza via Melfi to Rocchetta S. Antonio, a junction for Foggia, Gioia del Colle and Avellino (the second of these lines runs through the province of Potenza as far as Palazzo S. Gervasio), while a branch S. from the Naples and Taranto line at Sicignano terminates at Lagonegro, on the W. edge of the province. Communications are rendered difficult by the mountainous character of the interior. The mountains are still to some extent clothed with forests; in places the soil is fertile, especially along the Gulf of Taranto, though here malaria is the cause of inefficient cultivation. Olive-oil is the most important product. The total population of the province was 490,705 in 1901. The chief towns are Potenza (pop. 1901, 16,186), Avigliana (18,313), Matera (17,237), Melfi (14,649), Rionero in Vulture (11,809), Lauria (10,099).

BASILIDES, one of the most conspicuous exponents of Gnosticism, was living at Alexandria probably as early as the first decades of the 2nd century. It is true that Eusebius, in his Chronicle, dates his first appearance from A.D. 133, but according to Eusebius, Hist. Eccl. iv. 7 §§ 6-8, Agrippa Castor, who lived under Hadrian (117-138), already wrote a polemic against him, so that his activity may perhaps be set back to a date earlier than 138. Basilides wrote an exegetical work in twenty-four books on "his" gospel, but which this was is not known. In addition to this there are certain writings by his son Isidorus Περὶ προσφυοῦς ψυχῆς; Ἐξηγητικά on the prophet Parchor (Παρχώρ); Ήθικά. The surviving fragments of these works are collected and commented on in Hilgenfeld's Ketzergeschichte, 207-218. The most important fragment published by Hilgenfeld (p. 207), part of the 13th book of the Exegetica, in the Acta Archelai et Manetis c. 55, only became known in its complete form later, and was published by L. Traube in the *Sitzungsbericht der Münchener Akad.*, phil. histor. Kl. (1903), pp. 533-549. Irenaeus (*Adv. Haer.* i. 24 §§ 3-7) gives a sketch of Basilides' school of thought, perhaps derived from Justin's Syntagma. Closely related to this is the account in the Syntagma of Hippolytus, which is preserved in Epiphanius, Haer. 24, Philaster, Haer. 32, and Pseudo-Tertullian, Haer. 4. These are completed and confirmed by a number of scattered notices in the Stromateis of Clemens Alexandrinus. An essentially different account, with a pronounced monistic tendency, is presented by the so-called *Philosophumena* of Hippolytus (vii. 20-27; x. 14). Whether this last account, or that given by Irenaeus and in the Syntagma of Hippolytus, represents the original system of Basilides, has been the subject of a long controversy. (See Hilgenfeld p. 205, note 337.) The most recent opinion tends to decide against the *Philosophumena*; for, in its composition, Hippolytus appears to have used as his principal source the compendium of a Gnostic author who has introduced into most of the systems treated by him, in addition to the employment of older sources, his own opinions or those of his sect. The Philosophumena, therefore, cannot be taken into account in describing the teaching of Basilides (see also H. Stachelin, "Die gnostischen Quellen Hippolyts" in Texte und Untersuchungen, vi. 3; and the article Gnosticism). A comparison of the surviving fragments of Basilides, moreover, with the outline of his system in Irenaeus-Hippolytus (Syntagma) shows that the account given by the Fathers of the Church is also in the highest degree untrustworthy. The principal and most characteristic points are not noticed by them. If we assume, as we must needs do, that the opinions which Basilides promulgates as the teaching of the "barbari" (Acta Archelai c. 55) were in fact his own, the fragments prove him to have been a decided dualist, and his teaching an interesting further development of oriental (Iranian) dualism. Entirely consistent with this is the information given by the Acta Archelai that Basilides, before he came to Alexandria, had appeared publicly among the Persians (fuit praedicator apud Persas); and the allusion to his having appealed to prophets with oriental names, Barkabbas and Barkoph (Agrippa in Eusebius Hist. Eccl. iv. 7 § 7). So too his son Isidorus explained the prophecies of a certain Parchor (= Barkoph) and appealed to the prophecies of Cham^[1] (Clemens Alexandrinus, Stromat. vi. 6 § 53). Thus Basilides assumed the existence of two principles, not derivable from each other: Light and Darkness. These had existed for a long time side by side, without knowing anything of each other, but when they perceived each other, the Light had only looked and then turned away; but the Darkness, seized with desire for the Light, had made itself master, not indeed of the Light itself, but only of its reflection (species, color). Thus they had been in a position to form this world: unde nec perfectum bonum est in hoc mundo, et quod est, valde est exiguum. This speculation is clearly a development of that which the Iranian cosmology has to tell about the battles between Ahura-Mazda and Angro-Mainyu (Ormuzd and Ahriman). The Iranian optimism has been replaced here by a strong pessimism. This material world is no longer, as in Zoroastrianism, essentially a creation of the good God, but the powers of evil have created it with the aid of some stolen portions of light. This is practically the transference of Iranian dualism to the more Greek antithesis of soul and body, spirit and matter (cf. Irenaeus i. 24 § 5: animae autem eorum solam esse salutem, corpus enim natura corruptibile existit). The fundamental dualism of Basilides is confirmed also by one or two other passages. In the parable of the rich man and Lazarus, Basilides saw the proof of naturam sine radice et sine loco rebus supervenientem (Acta Archelai). According to Clemens, Strom. iv. 12 § 83, &c., Basilides taught that even those who have not sinned in act, even Jesus himself, possess a sinful nature. It is possibly also in connexion with the dualism of his fundamental views that he taught the transmigration of souls (Origen in Ep. ad Rom. lib. v.; Opp. de la Rue iv. 549; cf. Clemens, Excerpta ex Theodoto, § 28). Isidorus set up celibacy, though in a modified form, as the ideal of the perfect (Clemens, Strom. iii. 1 § 1, &c.) Clemens accuses Basilides of a deification of the Devil (θειάζειν τὸν διάβολον), and regards as his two dogmas that of the Devil and that of the transmigration of souls (Strom. iv. 12 § 85: cf. v. 11 § 75). It is remarkable too that Isidorus held the existence of two souls in man, a good and a bad (Clemens, Strom. ii. 20 113); with which may be compared the teaching of Mani about the two souls, which it is impossible to follow F, Ch. Baur in excluding, [2] and also the teaching of the *Pistis Sophia* (translated by C. Schmidt, p. 182, &c.). According to Clemens (Strom. ii. 20 § 112), the followers of Basilides spoke of πνεύματά

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τινα προσηρτημένα τῆ λογικῆ φυχῆ κατά τινα τάραχον καὶ σύγχυσιν ἀρχικήν: that is to say, here also is assumed an original confusion and intermingling. Epiphanius too tells us that the teaching of Basilides had its beginning in the question as to the origin of evil (*Haer*. xxiv. 6).

Now, of this sharply-defined dualism there is scarcely a trace in the system described by the Fathers of the Church. It is therefore only with caution that we can use them to supplement our knowledge of the true Basilides. The doctrine described by them that from the supreme God (the innatus pater) had emanated 365 heavens with their spirits, answers originally to the astronomical conception of the heavens with their 365 daily aspects (Irenaeus i. 24. 7; Trecentorum autem sexaginta quinque caelorum locales positiones distribuunt similiter ut mathematici). When, therefore, the supreme God is called by the name Αβρασαξ or Αβραξας, which contains the numerical value 365, it is worthy of remark that the name of the Persian god Mithras (Μείθρας) also was known in antiquity to contain this numerical value (Jerome in *Amos* 3; Opp. Vallarsi VI. i. 257). Speculations about the Perso-Hellenistic Mithras appear to have been transferred to the Gnostic Abraxas. Further, if the Pater innatus be surrounded by a series of (from five to seven) Hypostases (according to Irenaeus i. 24. 3; Νοῦς, Λόγος, Φρόνησις, Σοφία, Δύναμις; according to Clemens, Strom. iv. 25 § 164, Δικαιοσύνη and Έιρήνη may perhaps be added), we are reminded of the Ameshas-spentas which surround Ahura-Mazda. Finally, in the system of Basilides, the (seven ?) powers from whom this world originates are accepted as the lowest emanations of the supreme God. This conception which is repeated in nearly every Gnostic system, of (seven) world-creating angels, is a specifically oriental speculation. The seven powers which create and rule the world are without doubt the seven planetary deities of the later Babylonian religion. If, in the Gnostic systems, these become daemonic or semi-daemonic forces, this points to the fact that a stronger monotheistic religion (the Iranian) had gained the upper hand over the Babylonian, and had degraded its gods to daemons. The syncretism of the Babylonian and the Persian religion was also the nursing-ground of Gnosticism. When, then, Basilides identified the highest angel of the seven, the creator of the worlds, with the God of the Jews, this is a development of the idea which did not occur until late, possibly first in the specifically Christian circles of the Gnostics. We may note in this connexion that the system of Basilides ascribes the many battles and quarrels in the world to the privileged position given to his people by the God of the Jews.^[3]

It is at this point that the idea of salvation is introduced into the system. The confusion in the world has meanwhile risen to such a pitch that the supreme God sends his Nous, who is also called Christ, into the world (Irenaeus i. 24. 4). According to Clemens, the Saviour is termed πνεῦμα διακονούμενον (Strom. ii. 8 § 36) or διάκονος (Excerpta ex Theodoto, § 16). It is impossible certainly to determine how Basilides conceived the relation of this Saviour to Jesus of Nazareth. Basilides himself (Strom. iv. 12 § 83) knows of an earthly Jesus and denies the principle of his sinlessness (see above). According to the account given by Irenaeus, the Saviour is said to have appeared only as a phantasm; according to the Excerpta ex Theodoto, 17, the Diakonos descended upon Jesus at His baptism in the form of a dove, for which reason the followers of Basilides celebrated the day of the baptism of Jesus, the day of the ἐπιφανεία. as a high festival (Clemens, Strom. i. 21 § 18). The various attempts at combination probably point to the fact that the purely mythical figure of a god-saviour (Heros) was connected first by Basilides with Jesus of Nazareth. As to what the conception of Basilides was of the completion of the process of redemption, the available sources tell us next to nothing. According to an allusion in Clemens, Strom. ii. 8 § 36, with the mission of the Saviour begins the great separation of the sexes, the fulfilment and the restoration of all things. This agrees with the beginning of the speculation of Basilides. Salvation consists in this, that that which was combined for evil is once more separated.

Among the later followers of Basilides, actual magic played a determining part. They hand down the names of the rulers of the several heavens as a weighty secret. This was a result of the belief, that whoever knew the names of these rulers would after death pass through all the heavens to the supreme God. In accordance with this, Christ also, in the opinion of these followers of Basilides, was in the possession of a mystic name (Caulacau = $|\vec{r}|$) [hes. xxviii. 10) by the power of which he had descended through all the heavens to earth, and had then again ascended to the Father. Redemption, accordingly, could be conceived as simply the revelation of mystic names. In this connexion the name Abraxas and the Abraxas gems must be remembered. Whether Basilides himself had already given this magic tendency to Gnosticism cannot be decided.

Basilides, then, represents that form of Gnosticism that is closest to Persian dualism in its final form. His doctrine is most closely related to that of Satornil (Saturninus). From most of the other Gnostic sects, with the exception perhaps of the Jewish-Christian Gnosticism, he is distinguished by the fact that with him the figure of the fallen female god (Sophia Achamoth), and, in general, the idea of a fall within the godhead is entirely wanting. So far as we can see, on the other hand, Basilides appears actually to represent a further development of Iranian dualism, which later produced the religious system of Mani.

Accounts of the teaching of Basilides are to be found in all the more complete works on Gnosticism (see bibliography to the article Gnosticism). The original sources are best reproduced in Hilgenfeld, *Ketzergeschichte des Urchristentums* (1884), pp. 195-230. See also Krüger, article "Basilides," in Herzog-Hauck, *Realencyklopadie*, ed. 3.

(W. Bo.)

- [2] The materials are in Baur, Das manichäische Religionssystem (1831), p. 162, &c.
- [3] Whether the myth of the creation of the first man by the angels, which recurs in many Gnostic systems, found a place also in the system of Basilides, cannot be determined with any certainty. Philastrius, however, says: *hominem autem ab angelis factum asserit*, while according to Epiphanus xxiv. 2, men are created by the God of the Jews.

BASILISK (the Βασιλίσκος of the Greeks, and *Tsepha* (cockatrice) of the Hebrews), a name given by the ancients to a horrid monster of their own imagination, to which they attributed the most malignant powers and an equally fiendish appearance. The term is now applied, owing to a certain fanciful resemblance, to a genus of lizards belonging to the family *Iguanidae*, the species of which are characterized by the presence, in the males, of an erectile crest on the head, and a still higher, likewise erectile crest—beset with scales—on the back, and another on the long tail. *Basiliscus americanus* reaches the length of one yard; its colour is green and brown, with dark crossbars, while the crest is reddish. This beautiful, strictly herbivorous creature is rather common amidst the luxuriant vegetation on the banks of rivers and streams of the Atlantic hot lands of Mexico and Guatemala. The lizards lie upon the branches of trees overhanging the water, into which they plunge at the slightest alarm. Then they propel themselves by rapid strokes of the hind limbs, beating the water in a semi-erect position and letting the long rudder-like tail drag behind. They are universally known as *pasa-rios*, *i.e.* ferrymen.

[v.03 p.0480]

BASIM, a town of India, in the Akola district, Berar, 52 m. S.S.E. from Akola station of the Great Indian Peninsula railway. Pop. (1901) 13,823. Until 1905 it was the headquarters of the district of Basim, which had an area of 2949 sq. m.; but in that year the district was abolished, its component taluks being divided between the districts of Akola and Yeotmal. Its western portion, the Basim taluk, consists of a fertile tableland, about 1000 ft. above sea-level, sloping down westward and southward to the rich valley of the Penganga; its eastern portion, the taluks of Mangrul and Pasud, mainly of a succession of low hills covered with poor grass. In the Pasud taluk, however, there are wide stretches of woodland, while some of the peaks rise to a height of 2000 ft., the scenery (especially during the rains) being very beautiful. The climate of the locality is better than that of the other districts of Berar; the hot wind which blows during the day in the summer months being succeeded at night by a cool breeze. The principal crops are millet, wheat, other food grains, pulse, oilseeds and cotton; there is some manufacture of cotton-cloth and blankets, and there are ginning factories in the town. In 1901 the population was 353,410, showing a decrease of 11% in the decade, due to the famine of 1899-1900, which was severely felt in the district.

BASIN, THOMAS (1412-1491), bishop of Lisieux and historian, was born probably at Caudebec in Normandy, but owing to the devastation caused by the Hundred Years' War, his childhood was mainly spent in moving from one place to another. In 1424 he went to the university of Paris, where he became a master of arts in 1429, and afterwards studied law at Louvain and Pavia. He attended the council of Ferrara, and was soon made canon of the church at Rouen, professor of canon law in the new university of Caen and vicar-general for the bishop of Bayeux. In 1447 he became bishop of Lisieux. He was much involved in the wars between the English and French and was employed by Charles VII. of France, and by his successor Louis XI., at whose request Basin drew up a memorandum setting forth the misery of the people and suggesting measures for alleviating their condition. In 1464 the bishop joined the league of the Public Weal, and fell into disfavour with the king, who seized the temporalities of his see. After exile in various places Basin proceeded to Rome and renounced his bishopric. At this time (1474) Pope Sixtus IV. bestowed upon him the title of archbishop of Caesarea. Occupied with his writings Basin then passed some years at Trier, and afterwards transferred his residence to Utrecht, where he died on the 3rd of December 1491. He was buried in the church of St John, Utrecht.

Basin's principal work is his *Historiae de rebus a Carolo VII. et Ludovico XI. Francorum regibus eorumque in tempore in Gallia gestis.* This is of considerable historical value, but is marred to some extent by the author's dislike for Louis XI. At one time it was regarded as the work of a priest of Liége, named Amelgard, but it is now practically certain that Basin was the writer. He also wrote a suggestion for reform in the administration of justice entitled *Libellus de optimo ordine forenses lites audiendi et deferendi*; an *Apologia*, written to answer the charges brought against him by Louis XI; a *Breviloquium*, or allegorical account of his own misfortunes; a *Peregrinatio*; a defence of Joan of Arc entitled *Opinio et consilium super processu et condemnatione Johanne, dicte Puelle*, and other miscellaneous writings. He wrote in French, *Advis de Monseigneur de Lysieux au roi* (Paris, 1677).

See the edition of the *Historiae*, by J. E. J. Quicherat (Paris, 1855-1859); also G. du F. de Beaucourt, *Charles VII et Louis XI d'après Thomas Basin* (Paris, 1858).

BASIN, or Bason (the older form *bacin* is found in many of the Romanic languages, from the Late Lat. *baccinus* or *bacchinus*, probably derived from *bacca*, a bowl), a round vessel for holding liquids. Hence the term has various technical uses, as of a dock constructed with flood-gates in a tidal-river, or of a widening in a canal for unloading barges; also, in physical geography, of the drainage area of a river and its tributaries.

In geology, "basin" is equivalent to a broad shallow syncline, *i.e.* it is a structure proper to the bed rock of the district covered by the term; it must not be confused with the physiographic river basin, although it occasionally happens that the two coincide to some extent. Some of the better known geological basins in England are, the *London basin*, a shallow trough or syncline of

Tertiary, Cretaceous and Jurassic rocks; the *Hampshire basin*, of similar formations; and the numerous *coal basins*, *e.g.* the S. Wales coalfield, the Forest of Dean, N. Staffordshire coalfield, &c. The *Paris basin* is made of strata similar to those in the London and Hampshire basins. Strictly speaking, a structural basin is formed of rock beds which exhibit a *centroclinal* dip; an elongated narrow syncline or trough is not a basin. "Rock-basins" are comparatively small, steep-sided depressions that have been scooped out of the solid rock in mountainous regions, mainly through the agency of glaciers (see Cirque). Lakes sometimes occupy basins that have been caused by the removal in solution of some of the more soluble constituents (rock salt, &c.) in the underlying strata; occasionally lake basins have been formed directly by crustal movements.

BASINET (a diminutive of "basin"), a form of helmet or headpiece. The original small basinet was a light open cap, with a peaked crown. This was used alternately to, and even in conjunction with, the large heavy heaume. But in the latter half of the 13th century the basinet was developed into a complete war head-dress and replaced the heaume. In this form it was larger and heavier, had a vizor (though not always a pivoted vizor like that of the later armet), and was connected with the gorget by a "camail" or mail hood, the head and neck thus being entirely covered. It is always to be recognized by its peaked crown. The word is spelt in various forms, "bassinet," "bascinet," "bacinet," or "basnet." The form "bassinet" is used for the hooded wicker cradle or perambulator for babies.

BASINGSTOKE, a market-town and municipal borough of Hampshire, England, 48 m. W.S.W. from London by the London & South-Western railway; served also by a branch of the Great Western railway. Pop. (1901) 9793. The church of St Michael and All Angels is a fine specimen of a late Perpendicular building (principally of the time of Henry VIII.). The chapel of the Holy Ghost is a picturesque ruin, standing in an ancient cemetery, built for the use of the local gild of the Holy Ghost which was founded in 1525, but flourished for less than a century. Close to the neighbouring village of Old Basing are remains of Basing House, remarkable as the scene of the stubborn opposition of John, fifth marquess of Winchester, to Cromwell, by whom it was taken after a protracted siege in 1645. A castle occupied its site from Norman times. Numerous prehistoric relics have been discovered in the district, and a large circular encampment is seen at Winklebury Hill. Basingstoke has considerable agricultural trade, and brewing, and the manufacture of agricultural implements, and of clothing, are carried on. The Basingstoke canal, which connects the town with the river Wey and so with the Thames, was opened about 1794, but lost its trade owing to railway competition. It was offered for sale by auction unsuccessfully in 1904, but was bought in 1905. The municipal borough is under a mayor, four aldermen and twelve councillors. Area, 4195 acres.

Basingstoke is a town of great antiquity, and excavations have brought to light undoubted traces of Roman occupation. The first recorded historical event relating to the town is a victory won here by Æthelred and Alfred over the Danes in 871. According to the Domesday survey it had always been a royal manor, and comprised three mills and a market. A charter from Henry III. in 1256 granted to the men of Basingstoke the manor and hundred of that name and certain other privileges, which were confirmed by Edward III., Henry V. and Henry VI. As compensation for loss sustained by a serious fire, Richard II. in 1392 granted to the men of Basingstoke the rights of a corporation and a common seal. A charter from James I. dated 1622 instituted two bailiffs, fourteen capital burgesses, four justices of the peace, a high steward and under steward, two serjeants-at-mace and a court of record. Charles I. in 1641 changed the corporation to a mayor, seven aldermen and seven burgesses. Basingstoke returned two members to parliament in 1295, 1302 and 1306, but no writs are extant after this date. In 1202-1203 the market day was changed from Sunday to Monday, but in 1214 was transferred to Wednesday, and has not since been changed. Henry VI. granted a fair at Whitsun to be held near the chapel of the Holy Ghost. The charter from James I. confirmed another fair at the feast of St Michael the Archangel, and that of Charles I. granted two fairs on Basingstoke Down at Easter and on the 10th and 11th of September. The wool trade flourished in Basingstoke at an early date, but later appears to have declined, and in 1631 the clothiers of Basingstoke were complaining of the loss of trade and consequent distress.

See *Victoria County History—Hants*; F. G. Baigent and J. E. Millard, *History of Basingstoke* (Basingstoke, 1889).

BASIN-STAND, a piece of furniture consisting of a small stand, usually supported on three legs, and most commonly made of mahogany or rosewood, for holding a wash-hand basin. The smaller varieties were used for rose-water ablutions, or for the operation of hair-powdering. The larger ones, which possessed sockets for soap-dishes, were the predecessors of the ample modern wash-hand stand. Both varieties, often of very elegant form, were in extensive use throughout a large part of the 18th century.

BASKERVILLE, JOHN (1706-1775), English printer, was born at Wolverley in Worcestershire on the 28th of January 1706. About 1726 he became a writing master at Birmingham, and he seems to have had a great talent for calligraphy and for cutting inscriptions in stone. While at Birmingham he made some important improvements in the process of japanning, and gained a considerable fortune. About the year 1750 he began to make experiments in type-founding, producing types much superior in distinctness and elegance to any that had hitherto been employed. He set up a printing-house, and in 1757 published his first work, a *Virgil* in royal quarto, followed, in 1758, by his famous edition of Milton. In that year he was appointed printer to the university of Cambridge, and undertook editions of the Bible and the Book of Common Prayer. The *Horace*, published in 1762, is distinguished even among the productions of the

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Baskerville press for its correctness and for the beauty of the paper and type. A second *Horace* appeared in 1770 in quarto, and its success encouraged Baskerville to publish a series of quarto editions of Latin authors, which included Catullus, Tibullus, Propertius, Lucretius, Terence, Sallust and Florus. This list of books issued by Baskerville from his press lends some irony to the allegation that he was a person of no education. These books are admirable specimens of typography; and Baskerville is deservedly ranked among the foremost of those who have advanced the art of printing. His contemporaries asserted that his books owed more to the quality of the paper and ink than to the type itself, but the difficulty in obtaining specimens from the Baskerville press shows the estimation in which they are now held. His wife, Sarah Baskerville, carried on the business for some time after his death, which took place on the 8th of January 1775.

BASKET, a vessel made of twigs, cane or rushes, as well as of a variety of other materials, interwoven together, and used for holding, protecting or carrying any commodity. The process of interweaving twigs, rushes or leaves, is practised among the rudest nations of the world; and as it is one of the most universal of arts, so also does it rank among the most ancient industries, being probably the origin of all the textile arts of the world. Decorative designs in old ceramic ware are derived from the marks left by the basket mould used before the invention of the potter's wheel, and in the willow pattern on old china, and the basket capitals or mouldings of Byzantine architecture, the influence of the basketmaker's art is clearly traceable. Essentially a primitive craft, its relative importance is in inverse ratio to the industrial development of a people.

The word "basket" has been generally identified with the Latin bascauda, as in Martial (xiv. 99):—

"Barbara de pictis veni bascauda Britannis: Sed me iam mavult dicere Roma suam."

But its etymology is unknown, and the *New English Dictionary* states that there is no evidence to connect basket with *bascauda*, which denotes rather a tub, tray or brazen vessel.

Among many uncivilized tribes, baskets of a superior order are made and applied to various useful purposes. The North American Indians prepare strong water-tight *Wattape* baskets from the roots of a species of *abies*, and these they frequently adorn with very pretty patterns made from the dyed quills of their native porcupine, *Erethizon dorsatum*. Wealthy Americans have formed collections of the beautiful ware treasured as heirlooms in Indian families, and large prices have been paid for baskets made by the few squaws who have inherited the traditions and practice of the art, as much as £300 having been given for one specimen. It has been computed that baskets to the value of £1,000,000 were recently drawn from California and Arizona within two years. The Indians of South America weave baskets equally useful from the fronds of the Carnahuba and other palms. The Kaffirs and Hottentots of South Africa are similarly skilful in using the Ilala reed and the roots of plants; while the Abyssinians and the tribes of Central Africa display great adroitness in the art of basket-weaving.

Basket-making, however, has by no means been confined to the fabrication of those simple and useful utensils from which its name is derived. Of old, the shields of soldiers were fashioned of wicker-work, either plain or covered with hides. Xenophon, in his story of the Thirty Tyrants at Athens, relates that the exiled Greeks who had seized on the Peiraeus made themselves shields of whitened osiers; and similar weapons of defence are still constructed by modern savages. The huts of the earliest settlers in Rome and in western Europe generally were made of osier work plastered with clay. Some interesting remains of British dwellings of this nature found near Lewes in 1877 were described by Major-General H. L. F. Pitt-Rivers in Archaeologia, vol. xlvi. pp. 456-458. Boats of the same material, covered with the skins of animals, attracted the notice of the Romans in Britain; they seem to have been of the ordinary boat-shape. The basketwork boats mentioned by Herodotus as being used on the Tigris and Euphrates were round and covered with bitumen. Boats of this shape are still used on these rivers, and boats of analogous construction are employed in crossing the rivers of India, in which the current is not rapid. Nor have methods of making much changed. The strokes employed in the construction of basket-work found in Etruscan tombs and now exhibited in the Museo Etrusco at Florence, and in similar articles discovered in Egyptian tombs, are the same as those used by the English basket-maker to-day. General Pitt-Rivers, on comparing the remains excavated near Lewes with a modern hamper in his possession, found the method to be identical.

Since about the middle of the 19th century the character of basket-work in England has been greatly modified. The old English cradle, reticule, and other small domestic wares, have been driven out of the market by cheap goods made on the continent of Europe, and the coarse brown osier packing and hampers have been largely superseded by rough casks and cases made from cheap imported timber. This loss has, however, been more than counterbalanced by the production of work of a higher class, such as finely made chairs, tables, lounges and other articles of furniture; luncheon and tea-baskets and similar requisites of travel. In addition to the foregoing the chief categories of English manufacture are: vegetable and fruit baskets, transit and travelling hampers, laundry and linen baskets, partition baskets for wine, and protective wicker cases for fragile ware such as glass carboys, stone and other bottles. Wicker shields or cases made from cane pith, for the protection of shells, have been introduced by the English military authorities. Some evidence of the above-mentioned developments is afforded by a comparison of the wages lists of the London Union of Journeymen Basketmakers issued in 1865 and in 1896. The former consists of 87 printed pages; the latter of 144 pages, and these more

closely set.

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No machinery is used in basket-making. A considerable training and natural aptitude go to form the expert workman, for the ultimate perfection of shape and beauty of texture depend upon the more or less perfect conception of form in the craftsman's mind and on his power to impress it on a recalcitrant material. In England at least, he rarely uses a mould; every stroke made has a permanent effect on the symmetry of the whole work and no subsequent pressure will alter it. Wages in London vary from 25s. to 50s. per week according to aptitude. The Basketmakers' Company is one of the oldest craft gilds of the city of London and still exists.

Employment is given by the London Association for the Welfare of the Blind to a number of partially or wholly blind workpeople, who are engaged in the making of some of the coarser kinds of baskets; but the work, which bears obvious traces of its origin, is not commercially remunerative, and the association depends for partial support on the contributions of the charitable, and on supplementary sales of fine or fancy work produced under ordinary conditions and largely imported. Similar associations exist in some English provincial towns, in Edinburgh, in Dublin and Belfast, and in certain European cities.

The materials which are actually employed in the construction of basket-work are numerous and varied, but it is from certain species of willow that the largest supply of basket-making materials is produced. Willows for basket-work are extensively grown on the continent of Europe, whence large quantities are exported to Great Britain and the United States; but no rods surpass those of English growth for their tough and leathery texture, and the finest of basket-making willows are now cultivated in England—in Leicestershire, Nottinghamshire and the valleys of the Thames and the Trent. In the early part of the 19th century, considerable attention was given in Britain to the cultivation of willows suitable for basket-making, and the industry was first stimulated by premiums offered by the Society of Arts. Mr William Scaling of Basford, Notts, was a most successful grower and published some admirable pamphlets on the cultivation of willows. The most extensive English willow plantation or salicetum (Lat. salix, willow) of the present day is that planted by Mr W. P. Ellmore at Thurmaston near Leicester, and consists of about 100 acres of the finest qualities. Mr Ellmore, a practical basket-maker, successfully introduced some valuable continental varieties (see Osier).

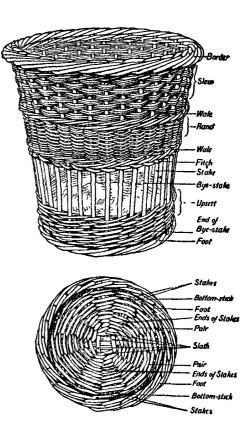
Willows are roughly classed by the basket-maker into "osier" and "fine." The former consists of varieties of the true osier, Salix viminalis; the latter of varieties of Salix triandra, S. purpurea and some other species and hybrids of tougher texture. For the coarsest work, dried unpeeled osiers, known as "brown stuff," are used; for finer work, "white (peeled) stuff" and "buff" (willows stained a tawny hue by boiling them previous to peeling). Brown stuff is sorted, before it reaches the workman, into lengths varying from 3½ ft. to 8 or 10 ft., the smallest being known in London and the home counties as "luke," the largest as "great," and the intermediate sizes as "long small," "threepenny" and "middleboro." White and buff rods are more carefully sorted, the smallest, about 2 ft. or less, being known as "small tack," and rising sizes as "tack," "short small," "small," "long small," "threepenny," "middleboro" and "great." Rods of two to three years' growth, known as "sticks," are used to form the rigid framework of the bottoms and lids of square work. In every case, except the last, the stuff is soaked in tanks to render it pliable before use—brown from three to seven days, white and buff from half-an-hour to half a day. The rods are used whole for ordinary work, but for baskets of slight and finer texture each is divided into "skains" of different degrees of size. "Skains" are osiers cleft into three or four parts, by means of an implement called a "cleaver," which is a wedge-shaped tool of boxwood inserted at the point or top end of the rod and run down through its entire length. They are next drawn through an implement resembling the common spokeshave, keeping the grain of the split next the iron or stock of the shave, while the pith is presented to the steel edge of the instrument, and in order to bring the split into a shape still more regular, it is passed through another implement called an upright, consisting of a flat piece of steel, each end of which is fashioned into a cutting edge, like that of an ordinary chisel and adjusted to the required width by means of a thumb-screw.

The tools required by a basket-maker are few and simple. They consist, besides the foregoing, of a shop-knife for cutting out material; a picking knife for cutting off the protruding butts and tops of the rods after the work is completed; two or three bodkins of varying sizes; a flat piece of iron somewhat narrowly triangular in shape for driving the work closely together; a stout pair of shears and a "dog" or "commander" for straightening sticks. The employer supplies a screw block or vice for gripping the bottom and cover sticks of square work, and a lapboard on which the workman fixes the upsetted bottom while siding up the basket. This is the full kit. A common round or oval basket may, however, be made with no other tools than a shop-knife and a bodkin. On the continent of Europe shapes or blocks are in use on which the fabric is in some cases woven.

The technicalities of basket-making may be easily followed by a glance at the illustration here reproduced by the courtesy of the Society of Arts.^[1] It will be seen that the "bye-stakes" are merely inserted in the "upsett," whereas the stakes are driven in at each side of the "bottom-sticks" and pricked up to form the rigid framework of the side. When the "bottom-stick" and "stake" are formed of one and the same continuous rod, it is termed a "league." If the bottom is made on a hoop the butts of the stakes are "sliped," *i.e.* cut away with a long cut of the shop-knife, and turned tightly round the hoop; they are then said to be "scallomed" on. The chief strokes used in constructing an ordinary basket are:—the "slew"—two or more rods woven together; the "rand," rods woven in singly; the "fitch," two rods tightly worked alternately one under the other, employed for skeleton work such as cages and waste-paper baskets; the "pair,"

two rods worked alternately one over the other, used for filling up bottoms and covers of round and oval baskets; and the "wale," three or more rods worked alternately, forming a string or binding course. Various forms of plaiting, roping and tracking are used for bordering off or finishing.

An ordinary oval basket is made by preparing the requisite number of bottom sticks, preserving their length greater than the required width of the bottom. They are ranged in pairs on the floor parallel to each other at small intervals, in the direction of the longer diameter of the basket, thus forming what may be called the "woof," for basket-work is literally a web. These parallel rods are then crossed at right angles by two pairs of the largest osiers, on the butt ends of which the workman places his feet; and they are confined in their places by being each woven alternately over and under the parallel pieces first laid down and their own butts which form the end bottom sticks. The whole now forms what is technically called the "slath," which is the foundation of the basket. Next other rods are taken and woven under and over the sticks all round the bottom until it be of sufficient size, and the woof be occupied by them. Thus the bottom or foundation on which the superstructure is to be raised is finished. This latter part is accomplished by sharpening the large ends of as many long and stout osiers as may be necessary to form the stakes or skeleton. These are forced between the bottom sticks



from the edge towards the centre, and are turned up or "upset" in the direction of the sides; then other rods are woven in and out between each of them, until the basket is raised to the intended height, or, more correctly speaking, the depth it is to receive. The edge or border is finished by turning down the ends of the stakes, now standing up, behind and in front of each other, whereby the whole is firmly and compactly united, and it is technically known as the "belly." A lid is constructed on the same plan as that of the bottom, and tied on with hinges formed of twisted rods; simple handles may be made by inserting similar rods by the sides of two opposite stakes and looping them under the border to form rope-like handles of three strands. This is the most simple kind of basket, from which others differ only in being made with finer materials and in being more nicely executed; but in these there is considerable scope for taste and fancy, and articles are produced of extreme neatness and ingenuity in construction.

In addition to willows many other materials are employed in the fabrication of wicker-work. Among the more important of these is the stem of *Calamus viminalis* or other allied species—the cane or rattan of commerce—which is used whole or made into skains. Since 1880 the central pith of this material, known as "cane-pulp" or "cane-pith," has been largely used in Great Britain and on the continent of Europe in the manufacture of furniture and other finer classes of work. About the same period plaited rush and straw, often coloured, came into use together with enamelled skains of cane. It must be admitted, however, that basket-work in these developments has encroached somewhat on the domain of cabinet-making; for wood and nails are now much used in constructing basket-work chairs, tables and other furniture.

With splits of various species of bamboo the Japanese and Chinese manufacture baskets of unequalled beauty and finish. The bamboo wicker-work with which the Japanese sometimes encase their delicate egg-shell porcelain is a marvellous example of manipulation, and they and the Chinese excel in the application of bamboo wicker-work to furniture. In India "Cajan" baskets are extensively made from the fronds of the Palmyra palm, Borassus flabelliformis, and this manufacture has been established in the Black Forest of Germany, where it is now an important and characteristic staple. Among the other materials may be enumerated the odorous roots of the khus-khus grass, Anatherum muricatum, and the leaves of various species of screw pine, used in India and the East generally. The fronds of the palm of the Seychelles, Lodoicea sechellarum, are used for very delicate basket-work in those islands. Strips of the New Zealand flax plant, Phormium tenax, are made into baskets in New Zealand. Esparto fibre is used in Spain and Algeria for rude fruit baskets. Various species of Maranta yield basket materials in the West Indies and South America; and the Tirite, a species of Calathea, a member of the order Zingiberaceae, is also employed similarly in Trinidad. Baskets are also frequently made from straw, from various sedges (Cyperus), and from shavings and splints of many kinds of wood.

The chief centres of English basket manufacture outside London are Thurmaston near Leicester, Basford near Nottingham, and Grantham. Large but decreasing quantities of light basket-work are made for the English market in Verdun, in the department of the Aisne, and in other parts of France; and great quantities of fancy and other work are produced in Belgium, in the Netherlands and in Germany, notably at Lichtenfels in Bavaria, at Sonnefeld in Saxony and in the Black Forest.

The import and export values of baskets and basket-ware, and of willows and rods for basket-

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making, have been enumerated in the Board of Trade returns for the United Kingdom since 1900, in which year basket-ware from foreign countries was imported to the value of £239,402. In 1901 the imports increased to £264,183; then they declined to £227,070 in 1905. The main sources of supply are shown in this comparison of 1900 and 1905:

| | 1900. | 1905. | |
|----------|---------|---------|---------|
| Belgium | £72,031 | £77,766 | +£5,735 |
| Holland | 58,214 | 54,407 | - 3,807 |
| France | 55,870 | 27,910 | -27,960 |
| Germany | 33,155 | 22,892 | -10,263 |
| Japan | 8,140 | 25,536 | +17,396 |
| Portugal | 5,066 | 3,971 | - 1,095 |

The increase from Japan (for 1904 the value was £52,377) and the decrease from France are remarkable.

The import values of foreign willows increased from £52,219 in 1900 to £62,286 in 1905, the most important exporting countries being:—

| | 1900. | 1905. | |
|---------|---------|---------|----------|
| Germany | £22,594 | £34,752 | +£12,158 |
| Belgium | 18,800 | 11,864 | - 6,936 |
| Holland | 9,771 | 12,750 | + 2,979 |

Small British re-exports of willows (£1808 in 1900 and £371 in 1905) and of baskets (£3785 in 1900 and £6633 in 1905) to foreign parts and British possessions are tabulated. No particulars of exports of British produce and manufacture are specified in the returns.

(T. O.)

[1] See the report of a paper by T. Okey, published in the *Journal* of the Society of Arts, January 11th, 1907.

BASKET-BALL, a game adapted to the open air, but usually played upon the floor of a gymnasium and in the cold season. It was the invention, in 1891, of James Naismith, an instructor in the gymnasium of the Young Men's Christian Association training-school at Springfield, Massachusetts. A demand had arisen for a game for the gymnasium class, which would break the monotony and take the place, during the winter months, of football and baseball, and which was not too rough to be played indoors. The idea of the game was first published in the *Triangle*, the school paper. It soon became one of the most popular indoor games of America, for girls as well as for men, and spread to England and elsewhere.

Basket-ball is played on a marked-off space 60 ft. by 40 ft. in extent, though in the open air the dimensions may be greater. In the middle of each short side and 10 ft. above the floor or ground, is placed a basket consisting of a net suspended from a metal ring 18 in. in diameter, backed, at a distance of 6 in., by a back-board 6 ft. long and 4 ft. high. The object of the game is to propel an inflated, leather-covered ball, 30 in. in circumference, into the opponents' basket, which is the goal, by striking it with the open hands. The side wins that scores most goals during two periods of play divided by an interval of rest. Although there is practically no limit to the number of players on each side, all indoor matches are played by teams of five, in positions opposing one another as in lacrosse, centre, right and left forwards and right and left guards (or backs). A referee has the general supervision of the game and decides when goals have been properly scored, and an umpire watches for infringements of the rules, which constitute *fouls*. There are also a scorer and timekeeper.

The game is started with the two opposing centres standing within a 4-foot ring in the middle of the floor. The referee puts the ball in play by tossing it into the air over the heads of the centres, who jump into the air for its possession or endeavour to bat it towards the opposing goal. From this moment the ball is in play until it falls into a basket, or passes the boundary-lines, or a foul is made. After a goal has been scored, the ball is again put in play by the referee in the centre. Should it be thrown across the boundary, a player of the opposing side, standing on the line at the point where the ball went over, puts it in play by passing or throwing it to one of his own side in any direction, there being no off-side rule—another point of similarity to lacrosse. His opponents, of course, try to prevent the pass or intercept the throw, thus securing the ball themselves. When a foul has been called, a player of the opposing side is allowed a "free throw" for his opponents' basket from a mark 15 ft. distant from it and without interference. A goal scored from a free throw counts one point; one scored while the ball is in play counts two. Hacking, striking, holding and kicking are foul, but a player may interfere with an opponent who has the ball so long as he uses one arm only and does not hold. A player must throw the ball from where he gets it, no running with it being allowed excepting when continuously bounding it on the floor. Basket-ball is an extremely fast game and admits of a high degree of combination or team-play. The principal qualifications of a good player are quickness of movement and of judgment, coolness, endurance, accuracy and self-control. Good dodging, throwing, passing and team-play are the important requisites of the game, which is looked upon as excellent winter training for outdoor games. Basket-ball, with somewhat modified rules, is extremely popular with young women.

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See Spalding's Basket-Ball Guide; and George T. Hepbron, How to Play Basket-Ball; and Spalding's Basket-Ball Guide for Women.

BASNAGE, JACQUES (1653-1723), French Protestant divine, was the eldest son of the eminent lawyer Henri Basnage, sieur de Franquenay (1615-1695), and was born at Rouen in Normandy in 1653. He studied classical languages at Saumur and afterwards theology at Geneva. He was pastor at Rouen (his native place) from 1676 till 1685, when, on the revocation of the edict of Nantes, he obtained leave of the king to retire to Holland. He settled at Rotterdam as a minister pensionary till 1691, when he was chosen pastor of the Walloon church. In 1709 the grand pensionary A. Heinsius (1641-1720) secured his election as one of the pastors of the Walloon church at the Hague, intending to employ him mainly in civil affairs. Accordingly he was engaged in a secret negotiation with Marshal d'Uxelles, plenipotentiary of France at the congress of Utrecht—a service which he executed with so much success that he was entrusted with several important commissions, all of which he discharged with great ability. In 1716 Dubois, who was at the Hague at the instance of the regent Orleans, for the purpose of negotiating the Triple Alliance between France, Great Britain and Holland, sought the advice of Basnage, who, in spite of the fact that he had failed to receive permission to return to France on a short visit the year before, did his best to further the negotiations. The French government also turned to him for help in view of the threatened rising in the Cevennes. Basnage had welcomed the revival of the Protestant church due to the zeal of Antoine Court; but he assured the regent that no danger of active resistance was to be feared from it, and, true to the principles of Calvin, he denounced the rebellion of the Camisards (q.v.) in his Instructions pastorales aux Réformés de France sur l'obéissance due aux souverains (Paris, 1720), which was printed by order of the court and scattered broadcast in the south of France. Basnage died on the 22nd of September 1723.

Basnage was a good preacher and a prolific writer. His works include several dogmatic and polemical treatises, but the most important are the historical. Of these may be mentioned Histoire de la religion des églises réformées (Rotterdam, 1690), the Histoire de l'église depuis Jésus-Christ jusqu'à présent (ib. 1699)—both of them written from the point of view of Protestant polemics—and, of greater scientific value, the Histoire des Juifs (Rotterdam, 1706, Eng. trans. 1708) and the Antiquités judaiques ou remarques critiques sur la république des Hébreux (1713). He also wrote short explanatory introductions and notes to a collection of copper-plate engravings, much valued by connoisseurs, called Histoires du Vieux et du Nouveau Testament, représentées par des figures gravées en taille-douce par R. de Hooge (Amsterdam, 1704).

BASOCHE, or BAZOCHE, with the analogous forms BASOQUE, BASOGUE and BAZOUGES; from the Lat. basilica, in the sense of law courts, a French gild of clerks, from among whom legal representatives (procureurs) were recruited. This gild was very ancient, even older than the gild of the procureurs, with which it was often at variance. It dated, no doubt, from the time when the profession of procureur (procurator, advocate or legal representative) was still free in the sense that persons rendering that service to others when so permitted by the law were not yet public and ministerial officers. For this purpose there was established near each important juridical centre a group of clerks, that is to say, of men skilled in law (or reputed to be so), who at first would probably fill indifferently the rôles of representative or advocate. Such was the origin of the Basoche of the parlement of Paris; which naturally formed itself into a gild, like other professions and trades in the middle ages. But this organization eventually became disintegrated, dividing up into more specialized bodies: that of the advocates, whose history then begins; and that of legal representatives, whose profession was regularized in 1344, and speedily became a saleable charge. The remnant of the original clerks constituted the new Basoche, which thenceforward consisted only of those who worked as clerks for the procureurs, the richer ones among them aspiring themselves to attain the position of procureur. They all, however, retained some traces of their original conditions. "They are admitted," writes an 18th-century author, "to plead before M. le lieutenant civil sur les réferés^[1] and before M. le juge auditeur; so that the procureurs of these days are but the former clerks of the Basoche, admitted to officiate in important cases in preference to other clerks and to their exclusion." From its ancient past the Basoche had also preserved certain picturesque forms and names. It was called the "kingdom of the Basoche," and for a long time its chief, elected each year in general assembly, bore the title of "king." This he had to give up towards the end of the 16th century, by order, it is said, of Henry III., and was thenceforth called the "chancellor." The Basoche had besides its maîtres des requêtes, a grand court-crier, a referendary, an advocate-general, a procureur-général, a chaplain, &c. In early days, and until the first half of the 16th century, it was organized in companies in a military manner and held periodical reviews or parades (montres), sometimes taking up arms in the king's service in time of war. Of this there survived later only an annual cavalcade, when the members of the Basoche went to the royal forest of Bondy to cut the maypole, which they afterwards set up in the court-yard of the Palais. We hear also of satirical and literary entertainments given by clerks of the Palais de Justice, and of the moralities played by them in public, which form an important element in the history of the national theatre; but at the end of the 16th century these performances were restricted to the great hall of the Palais.

To the last the Basoche retained two principal prerogatives. (1) In order to be recognized as a qualified procureur it was necessary to have gone through one's "stage" in the Basoche, to have been entered by name for ten years on its register. It was not sufficient to have been merely clerk to a procureur during the period and to have been registered at his office. This rule was the occasion of frequent conflicts during the 17th and 18th centuries between the members of the Basoche and the procureurs, and on the whole, despite certain decisions favouring the latter, the parlement maintained the rights of the Basoche. Opinion was favourable to it because the

certificats de complaisance issued by the procureurs were dreaded. These certificats held good, moreover, in places where there was no Basoche. (2) The Basoche had judiciary powers recognized by the law. It had disciplinary jurisdiction over its members and decided personal actions in civil law brought by one clerk against another or by an outsider against a clerk. The judgment, at any rate if delivered by a maître des requêtes, was authoritative, and could only be contested by a civil petition before the ancient council of the Basoche. The Châtelet of Paris had its special basoche, which claimed to be older even than that of the Palais de Justice, and there was contention between them as to certain rights. The clerks of the procureurs at the cour des comptes of Paris had their own Basoche of great antiquity, called the "empire de Galilée." The Basoche of the Palais de Justice had in its ancient days the right to create provostships in localities within the jurisdiction of the parlement of Paris, and thus there sprang up a certain number of local basoches. Others were independent in origin; among such being the "regency" of Rouen and the Basoche of the parlement of Toulouse.

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See also *Répertoire de jurisprudence des Guyot; Recueil des Statuts du royaume de la basoche* (Paris, 1654); L. A. Fabre, *Études historiques sur les clercs de la basoche* (Paris, 1856).

(J. P. E.)

[1] A procedure for obtaining a provisional judgment on urgent cases.

BASQUE PROVINCES (*Provincias Vascongadas*), a division of north-eastern Spain, comprising the three provinces of Álava, Biscay or Vizcaya and Guipúzcoa. Pop. (1900) 603,596; area 2739 sq. m., the third in density in Spain. The territory occupied by the Basque Provinces forms a triangle bounded on the west and south by the provinces of Santander, Burgos and Logrono, on the east by Navarre, on the north by France and the Bay of Biscay. The French Pays Basque forms part of the arrondissements of Bayonne and Mauléon. For an account of the people, their origin, customs and language, see Basques. Of the Provinces, Guipúzcoa is the only one which is wholly Basque, Álava is the least so. Its capital, Vitoria, is said to have been founded by the Gothic king Leovigild (581). Older than these divisions, the date of which is uncertain, the ancient limits of the dioceses of Pamplona, Bayonne and Calahorra, probably corresponded more nearly to the boundaries of the ancient tribes, the Autrigones, the Caristi, the Varduli and the Vascones, with their still differing dialects, than do these civil provinces.

Leaving aside the legendary and uncertain portion of their history, we find the Provinces in some districts dependent allies of Navarre, in others of Castile. In Biscay the counts of Haro were lords of Biscay from 1093 to 1350. There was a short union with Castile under Pedro the Cruel, but the definitive union did not take place till 1370. In Alava the ruling power was the confederation of Arriaga (so called after its meeting place), which united the province to the crown of Castile in 1332. Guipúzcoa, which had been dependent sometimes on Navarre, sometimes on Castile, was definitively united to Castile in 1200. From the year 1425 the provinces were desolated by party wars among the lesser nobles (parientes mayores) but these came to an end in 1460-1498, when Henry IV. and Ferdinand the Catholic strengthened the power of the towns and forbade the erection of any fortified house in the country. Though the three Basque Provinces were thus united to the crown of Spain, they still remained a land apart (tierra apartada). Their juntas acted to some extent in common; and although no written federal pact is known to have existed, they employed, as the symbol of their unity, a seal with the word Iruracbat, "The Three One," engraved upon it. They preserved their own laws, customs, fueros (see Basques), which the Spanish kings swore to observe and maintain. Unless countersigned by the juntas the decrees of Cortes and Spanish legislation or royal orders had no force in the Provinces. In the junta of 1481 Guipúzcoa alone proposed a treaty of friendship, peace and free trade for ten years with England, and this was signed in Westminster, on the 9th of March 1482 (see Rymer, Foedera). The Basques still made their own treaties with England and France and are mentioned apart from Spain in the treaty of Utrecht (1713). They still preserved in their municipal institutions the old style of republicas derived from the civitates and respublicae of ancient Rome. This kind of independence and autonomy lasted unchallenged until the death of Ferdinand VII. in 1833, when, in default of male heirs, his brother Don Carlos claimed the throne, confirmed the Basque fueros, and raised the standard of revolt against his niece, Isabel II. A seven years' war followed, in which an English legion under Sir George de Lacy Evans and a naval force under Lord John Hay took part. It was ended by the Convenio de Vergara (August 31st, 1839) in which the concession and modification of the fueros was demanded. The troubled period which followed the expulsion of Isabel II. in 1868 gave opportunity for a second Carlist war from 1872 to 1876. This ended, unlike the former one, in the utter defeat of the Carlist forces, and left the Provinces at the mercy of the government, without terms or agreement. In general government and legislation the Provinces were then assimilated to the rest of the nation. After 1876, the Provincial parliaments (diputaciones) were elected like the other provincial councils of Spain, deprived of many privileges and subjected to the ordinary interference of the civil governors. But their representatives, assisted by the senators and deputies of the Basque Provinces in the Cortes, negotiated successive pacts, each lasting several years, securing for the three Provinces their municipal and provincial self-government, and the assessment, distribution and collection of their principal taxes and octroi duties, on the understanding that an agreed sum should be paid annually to the state, subject to an increase whenever the national taxation of other provinces was augmented. In December 1906, after long discussion, the contribution of the Basque Provinces to the state, according to the law of the 21st of July 1876, was fixed for the next twenty years; for the first ten years at 8,500,000 pesetas, for the next ten an additional 500,000 pesetas, from 31st December 1916 to 31st December 1926, the province of Guipúzcoa paying in addition

700,000 pesetas to the treasury. These pacts have hitherto been scrupulously observed, and as the local authorities levy the contribution after their own local customs, landed property and the industrial and commercial classes are less heavily taxed in these territories than in the rest of Spain. Enough is raised, however, besides the amount handed over to the government, to enable the schools, roads, harbours and public works of every kind to be maintained at a standard which compares very favourably with other parts of Spain. When the three provinces sent in their first contingent of conscripts in 1877, it was found that all but about sixty knew how to read and write, and succeeding contingents have kept up this high standard.

In agriculture the Basque Provinces and the Pays Basque were great cider countries, but during the 19th century this was gradually replaced by wine-growing. The chief industries of the Basque Provinces are the sea fisheries and iron mining. Some of the mines round Bilbao have been worked from prehistoric times. In 1905 the Basque Provinces produced 5,302,344 tons of iron, over five millions of which came from Biscay, out of a total of 9,395,314 tons for the whole of Spain. More than the half of this total 5,845,895 tons, was exported to England. The swords of Mondragon in Guipúzcoa were renowned before those of Toledo. Eibar in the same province has long been a small-arms factory. There in the 19th century Señor Zuloaga successfully revived the artistic inlaying of gold and silver in steel and iron.

BIBLIOGRAPHY.-Of older works, though often uncritical, R. P. Henao's Averiguaciones de las Antiguedades de Cantabria (Salamanca, 1688) is still valuable (new edition, 1894). For all that relates to the manners and customs of the people, Corografía de Guipúzcoa, by R. P. M. de Larramendi, S.J., is indispensable. Written about 1750, it was first printed in Barcelona in 1882 (later edition, San Sebastian, 1896). There are excellent chapters on the Basque Provinces in the Introduccion a la Historia Natural, y a la Geografía Fisica de España, by D. Guillermo Bowles (Madrid, 1775). El Guipuzcoano instruido (San Sebastian, 1780), in the form of a dictionary, gives full details of the life, the rights, duties and obligations of a Basque citizen of that date. The Diccionario Geografico-Historico de España, tome i., ii. El Reyno de Navarra Senorio de Vizcaya y Provincias de Álava y Guipúzcoa (Madrid, 1802), is full of local information, but with a strong bias in favour of the central government. The best works on the various editions of the fueros are Historia de la Legislacion ... civil de España, by A. Marichalar, Marques de Montesa, and Cayetano Manrique; Fueros de Navarra Vizcaya, Guipúzcoa y Álava (Madrid, 2nd ed., 1868); and the Noticia de las cosas memorables de Guipúzcoa, by D. Pablo de Gorosabel (Tolosa, 1899-1901), the last volume of which by C. de Echegaray, gives the legislative acts down to May 1900. Las Provincias Vascongadas a Fines de la Edad Media, by D. Carmelo de Echegaray (San Sebastian, 1895), is excellent. There is a Historia de Bizcaya, by Dr E. de Labayru, and a Compendio of the same by Fermin Herran (Bilbao, 1903). D. Carmelo de Echegaray, Cronista de las Provincias Vascongadas, with his colleagues D. Serapio Mugica, F. Soraluce, and other historians, has examined, catalogued and indexed the municipal archives of all the towns, without which no true history can be written. Several discoveries of important missing documents and MSS. were thus made. The development of the Basque mining industry is fully described in Las Minas de hierro de la provincia de Vizcaya, progressos realizados en esta region derde 1870 hasta 1899 (Bilbao, 1900).

(W. WE.)

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BASQUES, a people inhabiting the three Basque Provinces—Biscay, Álava and Guipúzcoa—and Navarre in Spain, and the arrondissement of Bayonne and Mauléon in France. The number of those who can be considered in any sense pure Basques is probably about 600,000 in Europe, with perhaps 100,000 emigrants in the Americas, chiefly in the region of La Plata in South America. The word Basques is historically derived from *Vascones*, which, written *Wascones*, has also given the name *Gascons* to a very different race. The Basques call themselves *Eskualdunak*, *i.e.* "those who possess the *Eskuara*," and their country Eskual-Herria.

Language.—The original and proper name of the language is Eskuara (euskara, uskara), a word the exact meaning of which has not yet been ascertained, but which probably corresponds with the idea "clearly speaking." The language is highly interesting and stands as yet absolutely isolated from the other tongues of Europe, though from the purely grammatical point of view it recalls the Magyar and Finnic languages. It is an agglutinative, incorporating and polysynthetic system of speech; in the general series of organized linguistic families it would take an intermediate place between the American on the one side and the Ugro-Altaic or Ugrian on the other.

Basque has no graphic system of its own and uses the Roman character, either Spanish or French; a few particular sounds are indicated in modern writings by dotted or accented letters. The alphabet would vary according to the dialects. Prince L. L. Bonaparte counts, on the whole, thirteen simple vowels, thirty-eight simple consonants. Nasal vowels are found in some dialects as well as "wet" consonants—ty, dy, ny, &c. The doubling of consonants is not allowed and in actual current speech most of the soft consonants are dropped. The letter r cannot begin a word, so that rationem is written in Basque arrazoin.

Declension is replaced by a highly developed postpositional system; first, the definite article itself a (plural ak) is a postposition—zaldi, "horse," zaldia "the horse," zaldiak, "the horses." The declensional suffixes or postpositions, which, just like our prepositions, may be added to one another, are postponed to the article when the noun is definite. The principal suffixes are k, the mark of the plural, and of the singular nominative agent; n, "of" and "in"; i, "to"; z, "by"; ik, "some"; ko, "from," "of" (Lat. a); tik, "from" (Lat. ex); tzat, kotzat, tzako, "for"; kin, gaz, "with";

gatik, "for the sake of"; gana, "towards"; ra, rat, "to," "into," "at," &c. Of these suffixes some are joined to the definite, others to the indefinite noun, or even to both.

The personal pronouns, which to a superficial observer appear closely related to those of the Semitic or Hamitic languages, are ni, "I"; hi, "thou"; gu, "we"; zu, "you" in modern times, zu has become a polite form of "thou," and a true plural "you" (i.e. more than one) has been formed by suffixing the pluralizing sign k—zuek. The pronouns of the third person are mere demonstratives. There are three: hura or kura, "that"; hau or kau, "this"; ori or kori, "this" or "that." Other unexplained forms are found in the verbal inflexions, e.g. d, it, and t, "I" or "me"; d-akus-t, "it see I" = I see it; d-arrai-t, "it follows me." The demonstratives are used as articles: gazt-en-or, "this younger one"; andre-ori, "this lady at some distance." The reflective "self" is expressed by buru, "head." The relative does not exist, and in its place is used as a kind of verbal participle with the ending n: doa, "he goes"; doana, "he who is going"; in the modern Basque, however, by imitation of French or Spanish, the interrogative zein, zoin, is used as a relative. Other interrogatives are nor, "who"; zer, "what"; zembait, "how much," &c. Bat, "one"; batzu, "several"; bakotch, "each"; norbait, "some one"; hanitz or hainitz, "much"; elkar, "both"; are the most common indefinite pronouns. The numeral system is vicesimal; e.g. 34 is hogoi ta hamalaur, "twenty and fourteen." The numbers from one to ten are: 1, bat; 2, bi; 3, hiru; 4, lau; 5, bortz or bost; 6, sei; 7, zazpi; 8, zortzi; 9, bederatzi; 10, hamar, 20, hogoi or hogei; 40, berrogoi (i.e. twice twenty); 100, ehun. There is no genuine word for a thousand.

The genders in Basque grammar are distinguished only in the verbal forms, in which the sex of the person addressed is indicated by a special suffix; so that <code>eztakit</code> means, "I do not know it"; but to a woman one says also: <code>eztakinat</code>, "I do not know it, oh woman!" To a man one says: <code>eztakiat</code> (for <code>eztakikat</code>), "I do not know it, oh man!" moreover, certain dialectic varieties have a respectful form: <code>eztakizut</code>, "I do not know it, you respectable one," from which also a childish form is derived, <code>eztakichut</code>, "I do not know it, oh child!"

The Basque conjugation appears most complicated, since it incorporates not only the subject pronouns, but, at the same time, the indirect and direct complement. Each transitive form may thus offer twenty-four variations—"he gives it," "he gives it to you," "he gives them to us," &c., &c. Primitively there were two tenses only, an imperfect and a present, which were distinguished in the transitive verb by the place of the personal subject element: dakigu, "we are knowing it" (gu, i.e. we), and ginaki, "we were knowing it"; in the intransitive by a nasalization of the radical: niz, "I am"; nintz, "I was." In modern times a conjectural future has been derived by adding the suffix ke, dakiket, "I will, shall or probably can know it." No proper moods are known, but subjunctive or conjunctive forms are formed by adding a final n, as dakusat, "I am looking at it"; dakusadan, "if I see it." No voices appear to have been used in the same radical, so that there are separate transitive and intransitive verbs.

In its present state Basque only employs its regular conjugation exceptionally; but it has developed, probably under the influence of neo-Latin, a most extensive conjugation by combining a few auxiliary verbs and what may be called participles, in fact declined nouns: *ikusten dut*, "I have it in seeing," "I see it"; *ikusiko dut*, "I have it to be seen," "I will see it," &c. The principal auxiliaries are: *izan*, "to be"; and *ukan*, "to have"; but *edin*, "to can"; *eza*, "to be able"; *egin*, "to make"; *joan*, "to go"; *eroan*, "to draw," "to move," are also much used in this manner.

The syntax is simple, the phrases are short and generally the order of words is: subject, complement, verb. The determining element follows the determined: *gizon handia*, "man great the"—the great man: the genitive, however, precedes the nominative—*gizonaren etchea*, "the man's house." Composition is common and it has caused several juxtaposed words to be combined and contracted, so that they are partially fused with one another—a process called *polysyntheticism; odei*, "cloud," and *ots*, "noise," form *odots*, "thunder"; *belar*, "forehead," and *oin*, "foot," give *belaun*, "knee," front of the foot. The vocabulary is poor; general and synthetic words are often wanting; but particular terms abound. There is no proper term for "sister," but *arreba*, a man's sister, is distinguished from *ahizpa*, a woman's sister. We find no original words for abstract ideas, and God is simply "the Lord of the high."

The vocabulary, however, varies extremely from place to place and the dialectic varieties are very numerous. They have been summed up by Prince L. L. Bonaparte as eight; these may be reduced to three principal groups: the eastern, comprising the Souletine and the two lower Navarrese; the central formed by the two upper Navarrese, the Guipúzcoan and the Labourdine; and the western, formed by the Biscayan, spoken too in Álava. These names are drawn from the territorial subdivisions, although the dialects do not exactly correspond with them.

Ethnology and Anthropology.—The earliest notices of the geography of Spain, from the 5th century B.C., represent Spain as occupied by a congeries of tribes distinguished mainly as Iberi, Celtiberi and Celts. These had no cohesion together, and unless temporarily united against some foreign foe, were at war with one another and were in constant movement; the ruder tribes being driven northwards by the advancing tide of Mediterranean civilization. The tribes in the south in Baetica had, according to Trogus and Strabo, written laws, poems of ancient date and a literature. Of this nothing has reached us. We have only some inscriptions, legends on coins, marks on pottery and on megalithic monuments, in alphabets slightly differing, and belonging to six geographical districts. These still await an interpreter; but they show that a like general language was once spoken through the whole of Spain, and for a short distance on the northern slope of the Pyrenees. The character of the letters is clearly of Levant origin, but the particular alphabets, to which each may be referred, and their connexion, if any, with the Basque, are still

undetermined. It was early remarked by the classical scholars among the Basques after the Renaissance that certain names in the ancient toponymy of Spain, though transcribed by Greek and Latin writers, *i.e.* by foreigners, ignorant of the language, yet bear a strong resemblance to actual place-names in Basque (*e.g.* Iliberis, Iriberry); and in a few cases (Mondiculeia, Mendigorry; Iluro, Oloron) the site itself shows the reason of the name. Andres de Poza (1587), Larramendi (1760), Juan B. Erro (1806) and others had noted some of these facts, but it was W. von Humboldt (1821) who first aroused the attention of Europe to them. This greater extension of a people speaking a language akin to the Basque throughout Spain, and perhaps in Sicily and Sardinia, has been accepted by the majority of students, though some competent Basque scholars deny it; and the certain connexion of the Basques, either with the Iberians or Celtiberians, whether in race or language, cannot be said to be conclusively proved as long as the so-called Celtiberian inscriptions remain uninterpreted. (See also IBERIANS.)

After so many centuries of close contact and interpenetration with other peoples, we can hardly expect to find a pure physical type among the present Basques. All that we can expect is to be able to differentiate them from their neighbours. The earliest notice we have of the Basques, by Einhard (778), speaks of their wonderful agility. The next, the pilgrim of the Codex Calixtinus (12th century), says the Basques are fairer in face (*facie candiliores*) than the Navarrese.

Anthropologists no longer rely solely on craniology, and the measurement of the skull, to distinguish race. The researches of Aranzadi (1889 and 1905) and of Collignon (1899) show them as less fair than northern Europeans, but fairer than any of the southern races; not so tall as the Scandinavians, Teutons or British, but taller than their neighbours of southern races. There is no tendency to prognathism, as in some of the Celts. The profile is often very fine; the carriage is remarkably upright. Neither markedly brachycephalous nor dolichocephalous, the skull has yet certain peculiarities. In the conjunction of the whole physical qualities, says Collignon, there is a Basque type, differing from all those he has studied in Europe and northern Africa. There are differences of type among themselves, yet, when they emigrate to South America, French and Spanish Basques are known simply as Basques, distinct from all other races.

On the origin of the Basques, the chief theories are:—(1) that they are descended from the tribes whom the Greeks and Latins called Iberi; (2) that they belong to some of the fairer Berber tribes ("Eurafrican," Hervé) and through the ancient Libyans, from a people depicted on the Egyptian monuments; (3) the Atlantic theory, that they belong to a lost Atlantic continent, whose inhabitants were represented by the Guanches of the Canary Islands, and by a fair race on the western coast of Africa; (4) that they are an indigenous race, who have never had any greater extension than their present quarters.

The remains of prehistoric races hitherto discovered in Spain throw little light on the subject, but some skulls found in southeastern Spain in the age of metal resemble the Basque skulls of Zaraus

The megalithic remains, the dolmens, menhirs, cromlechs and stone circles are said to resemble more closely those of northern Africa than the larger remains of Brittany and of the British Isles. Aristotle tells us that the Iberi fixed obelisks round the tomb of each warrior in number equal to the enemies he had slain (*Polit.* vii. c. 2. 6), but proof is wanting that these Iberi were Basques.

Iberian inscriptions have been found on the so-called *toros de guisando*, rude stone bulls or boars, on other monuments of northern Spain and in ancient sepulchres; some of these figures, *e.g.* at the *Cerro de los Santos* in Murcia, recall the physical type of the modern Basques, but they are associated with others of very varied types.

Of the religion of the Basques anterior to Christianity, little is certainly known. The few notices we have point to a worship of the elements, the sun, the moon and the morning star, and to a belief in the immortality of the unburnt and unburied body. The custom of the *couvade*, attributed by Strabo to the Cantabri, is unknown among the modern Basques. As elsewhere, the Romans assimilated Basque local deities to their own pantheon, thus we find Deo *Baicorrixo* (Baigorry) and *Herauscorrtsehe* in Latin inscriptions. But the name which the Basques themselves give to the Deity is *Jaincoa*, *Jaungoikoa*, which may mean lord or master, Lord of the high; but in the dialect of Roncal, *Goikoa* means "the moon," and *Jaungoikokoa* would mean "Lord of the moon." The term *Jaun*, lord or master, *Etcheko Jauna*, the lord or master of the house, is applied to every householder.

There is no aid to be got from folk-tales; none can be considered exclusively Basque and the literature is altogether too modern. The first book printed in Basque, the *Linguae Vasconum Primitiae*, the poems of Bernard d'Echepare, is dated 1545. The work which is considered the standard of the language is the Protestant translation of the New Testament made by Jean de Liçarrague, under the auspices of Jeanne d'Albret, and printed at La Rochelle in 1571. The *pastorales* are open-air dramas, like the moralities and mysteries of the middle ages. They are derived from French materials; but a dancing chorus, invariably introduced, and other parts of the *mise-en-scène*, point to possibly earlier traditions. No MS. hitherto discovered is earlier than the 18th century. The greater part of the other literature is religious and translated. It is only recently that a real literature has been attempted in Basque with any success.

In spite of this modernity in literature there are other matters which show how strong the conservatism of the Basques really is. Thus, in dealing with the language, the only true measure of the antiquity of the race, we find that all cutting instruments are of stone; that the week has only three days. There are also other survivals now fast disappearing. Instead of the plough, the

Basques used the *laya*, a two-pronged short-handled steel digging fork, admirably adapted to small properties, where labour is abundant. They alone of the peoples of western Europe have preserved specimens of almost every class of dance known to primitive races. These are (1) animal (or possibly totem) dances, in which men personate animals, the bear, the fox, the horse, &c.; (2) dances to represent agriculture and the vintage performed with wine-skins; (3) the simple arts, such as weaving, where the dancers, each holding a long coloured ribbon, dance round a pole on which is gradually formed a pattern like a Scotch tartan; (4) war-dances, as the sword-dance and others; (5) religious dances in procession before the Host and before the altar; (6) ceremonial dances in which both sexes take part at the beginning and end of a festival, and to welcome distinguished people. How large a part these played in the life of the people, and the value attached to them, may be seen in the vehement defence of the religious dances by Father Larramendi, S.J., in his *Corografia de Guipúzcoa*, and by the large sums paid for the privilege of dancing the first *Saut Basque* on the stage at the close of a *Pastorale*.

The old Basque house is the product of a land where stone and timber were almost equally abundant. The front-work is of wood with carved beams; the balconies and huge over-hanging roof recall the Swiss chalet, but the side and back walls are of stone often heavily buttressed. The cattle occupy the ground-floor, and the first storey is reached often by an outside staircase. The carven tombstones with their ornaments resemble those of Celtic countries, and are found also at Bologna in Italy.

In customs, in institutions, in administration, in civil and political life there is no one thing that we can say is peculiarly and exclusively Basque; but their whole system taken together marks them off from other people and especially from their neighbours.

[v.03 p.0488]

Character.—The most marked features in the Basque character are an intense self-respect, a pride of race and an obstinate conservatism. Much has been written in ridicule of the claim of all Basques to be noble, but it was a fact both in the laws of Spain, in the fueros and in practice. Every Basque freeholder (vecino) could prove himself noble and thus eligible to any office. They are not a town race; a Basque village consists of a few houses; the population lives in scattered habitations. They do not fear solitude, and this makes them excellent emigrants and missionaries. They are splendid seamen, and were early renowned as whale fishermen in the Bay of Biscay. They were the first to establish the cod-fishery off the coast of Newfoundland. They took their full part in the colonization of America. Basque names abound in the older colonial families, and Basque newspapers have been published in Buenos-Aires and in Los Angeles, California. As soldiers they are splendid marchers; they retain the tenacity and power of endurance which the Romans remarked in the Iberians and Celtiberians. They are better in defence than in attack. The failure to take Bilbao was the turning-point in both Carlist wars. In civil institutions and in the tenures of property the legal position of women was very high. The eldest born, whether boy or girl, inherited the ancestral property, and this not only among the higher classes but among the peasantry also. In the fueros an insult done to a woman, or in the presence of a woman, is punished more severely than a similar offence among men. This did not prevent women from working as hard as, or even harder than, the men. All authors speak of the robust appearance of the women-rowers on the Bidassoa, and of those who loaded and unloaded the ships in Bilbao.

Institutions.—In their municipal institutions they kept the old Roman term respublica for the civitas and the territory belonging to it. All municipal officers were elective in some form or other, and there is hardly any mode of election, from universal suffrage to nomination by a single person chosen by lot, that the Basques have not tried. The municipalities sent deputies to the juntas or parliaments of each province. These assemblies took place originally in the open air, as in other parts of the Pyrenees, under trees, the most celebrated of which is the oak of Guernica in Biscay, or under copses, as the Bilzaar in the French Pays Basque. The cortes of Navarre met at Pamplona. Delegates from the juntas met annually to consider the common interests of the three provinces. Besides the separate municipalities and the juntas, there were often associations and assemblies of three or five towns, or of three or four valleys, to preserve the special privilege or for the special needs of each. Hence was formed a habit of self-government, the practice of legislative, judicial and administrative functions, which resulted gradually in a code of written or unwritten laws embodied in the fueros or fors of each province, and the cartas-pueblos of the towns. In form these *fueros* or charters are often grants from the lord or sovereign; in reality they are only a confirmation or codification of unwritten customary laws in practice among the people, the origin of which is lost in antiquity. The kings of Castile, of Spain and of Navarre were obliged at their accession, either in person, or by deputy, to swear to observe these fueros; and this oath was really kept. While the cortes were trampled upon and absolutism reigned both in Spain and in France, the Basque fueros were respected; in Spain to the middle of the 19th century and in France down to the Revolution. The fueros thus observed made the Basque provinces a land apart (una tierra apartada), a self-governing republic (una verdadera autonomia), under an absolute monarchy, to which, however, they were always loyal. And this independence was acknowledged, not only in local, but also in international and European treaties, as in art. 15 of the treaty of Utrecht 1713. So the act of the 3rd of June 1876, which assimilated the Basque Provinces to the rest of Spain, acknowledged the true self-government which they had enjoyed for centuries.

The circumstances and methods which enabled the Basques to preserve this independence were, first, the isolation caused by their peculiar language; next, the mountainous and easily-defended nature of the country, its comparative poverty and the possession of a sea-board. Then there were the rights and the safeguards which the *fueros* themselves gave against encroachments.

The rights were:—freedom of election to all offices and to the juntas; exemption from all forced military service except for the defence of the country and under their own officers; and payment beforehand exacted for all service beyond their own frontiers (this did not of course exclude voluntary service of individuals in the Spanish or French armies). Then there was free trade with foreign nations, and especially between the Basques of both nations. The customs' frontier of Spain really began on the Ebro. Then no decree or sentence of the royal authorities could have effect in the provinces except countersigned by the junta. Otherwise the resisting and even the killing of a royal officer was no murder. But chiefest of all the safeguards was the provision that no tax or contribution should be levied or paid to the crown till all petitions had been heard and wrongs redressed; that such a vote should be the last act of the junta or cortes, and the money should be paid not as a demand of right or a tax, but as a free gift and above all a voluntary one. It was paid in a lump sum, and the repartition and levying were left entirely in the hands of the junta and the municipalities.

As a further precaution against the inroads of absolutism, no lawyer was allowed to be a deputy to the junta and all clergy were likewise excluded. The Basques considered that men of these professions would be always on the side of tyranny. One lawyer (*letrado*) was present at the juntas for consultation on the points of law, but he was not allowed to vote. So strictly was this observed that after the battle of Vitoria in 1813, when it was difficult to get together a quorum for the reorganization of the country, the *letrado*, though one of the most active and influential members in consultation, was not allowed to vote.

The relations between Church and State among the Basques have been very remarkable. They are a highly religious people, eminently conservative in their religious practices. In religion alone, through Ignatius de Loyola of Guipúzcoa and Francis Xavier of Navarre, they have left their mark upon Europe. They have kept the earliest form of Christian marriage and of the primitive order of deaconesses, forgotten elsewhere in the West. The feast of Corpus Christi instituted by Pope Urban IV. (1262) still appears in Basque almanacs as *Phesta-berria*, the New Feast. The earliest notice that we have of them speaks of their liberality to the clergy; yet with all this religious conservatism they have never allowed themselves to be priest-ridden. They constantly resisted the attempts of the crown to force upon them the authority of the Spanish bishops. When Ferdinand the Catholic came to Biscay in 1477 to swear to the fueros, he was compelled to send back the bishop of Pamplona whom he had brought with him. No strange priest could enter the town when the junta was sitting, and in some places if a deputy was seen speaking to a priest before a session he lost his vote for that day. The bishops had no share in ecclesiastical patronage in Guipúzcoa; all was in the hands of the king, of the nobles or of the municipalities, or else the priests were chosen by competitive examination or elected by the people. They would not allow the priest to interfere with the games or dances, and when the drama was forbidden in all Spain in 1757 by the authority of the Spanish bishops, the cortes of Navarre compelled the king to withdraw the order.

For a stranger coming from lands of larger farms and apparently higher cultivation, the agriculture of the Basques seems poor, but the old scattered homesteads show a sense of security that has been lacking in many parts of Spain; and the Basques have shown great adaptability in suiting their agriculture to new conditions, helped by the presence of the courts at San Sebastian and Biarritz. When the old self-sufficient village industries declined, in consequence of the invention of machinery and manufacture elsewhere, the Basques entered at once upon emigration to the agricultural parts of the Americas, and the result has been that the Basque Provinces and the Pays Basque probably have never been more prosperous than they are now, and perhaps a new Eskual-herria and a new Eskuara are being built up in the distant lands to which they are such valued immigrants.

[v.03 p.0489]

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(W. WE.; J. VN.)

BASRA (written also Busra, Bassora and Bussora), the name of a vilayet of Asiatic Turkey, and of its capital. The vilayet has an area of 16,470 sq. m., formed in 1884 by detaching the southern districts of the Bagdad vilayet. It includes the great marshy districts of the lower Euphrates and Tigris, and of their joint stream, the Shatt el-Arab, and a sanjak on the western shore of the Persian Gulf. A settled population is found only along the river banks. Except the capital, Basra, there are no towns of importance. Korna, at the junction of the two great rivers; Amara on the Tigris; Shatra on the Shatt el-Haï canal, connecting the Tigris and Euphrates; Nasrieh, at the junction of that canal with the Euphrates and Suk esh-Sheiukh, on the lower reaches of the Euphrates, are the principal settlements, with a population varying from 3000 to 10,000 or somewhat less. Along the Shatt el-Arab and the lower reaches of the Tigris and Euphrates there are vast plantations of date-palms, which produce the finest dates known. Here and there are found extensive rice-fields: liquorice, wheat, barley and roses are also cultivated in places. But in general the ancient canals on which the fertility of the country depends have been allowed to go to ruin. The whole land is subject to inundations which render settled agriculture impracticable, and the population consists chiefly of nomadic and semi-nomadic tribes whose wealth consists in herds of buffaloes, horses, sheep and goats. The principal exports are wool, dates, cereals, gum, liquorice-root and horses. The climate is humid and unhealthy. The population is estimated at about 200,000 almost exclusively Moslems, of whom three-quarters are Shi'ites. There are about 4000 Jews and perhaps 6000 Christians, among whom are reckoned the remains of the curious sect of Sabaeans or Mandaeans, whose headquarters are in the neighbourhood of Suk esh-Sheiukh.

The capital of the vilayet, also called Basra, is situated in 47° 34' E. long. and 32° N. lat., near the western bank of the Shatt el-Arab, about 55 m. from the Persian Gulf. The town proper lies on the canal el-'Assar about 11/2 to 2 m. W. of the Shatt el-Arab. There are no public buildings of importance. The houses are meanly built, partly of sun-dried and partly of burnt bricks, with flat roofs surrounded by parapets. The bazaars are miserable structures, covered with mats laid on rafters of date trees. The streets are irregular, narrow and unpaved. The greater part of the area of the town is occupied by gardens and plantations of palm-trees, intersected by a number of little canals, cleansed twice daily with the ebb and flow of the tide, which rises here about 9 ft. These canals are navigated by small boats, called bellem (plur. ablam), resembling dug-outs in form, but light and graceful. At high-tide, accordingly, the town presents a very attractive appearance, but at low-tide, when the mud banks are exposed, it seems dirty and repulsive, and the noxious exhalations are extremely trying. The whole region is subject to inundations. The town itself is unhealthy and strangers especially are apt to be attacked by fever. Basra is the port of Bagdad, with which it has steam communication by an English line of river steamers weekly and also by a Turkish line. The Shatt el-Arab is deep and broad, easily navigable for ocean steamers, and there is weekly communication by passenger steamer with India, while two or more freight lines, which also take passengers, connect Basra directly with the Mediterranean, and with European and British ports. It is the great date port of the world, and the dates of Basra are regarded as the finest in the market. Besides dates the principal articles of export are wool, horses, liquorice, gum and attar of roses. The annual value of the exports is approximately £1,000,000 and of the imports a little more. The foreign trade is almost exclusively in the hands of the English, but of late the Germans have begun to enter the market, and the Hamburg-American line of steamers has established direct communication. Since 1898 there has been a British consul at Basra (before that time he was a representative of the Indian government). France and Russia also maintain consular establishments at Basra. The settled population of Basra is probably under 50,000, but how much it is impossible to estimate. It is a heterogeneous mixture of all the nations and religions of the East-Turks, Arabs, Persians, Indians, Armenians, Chaldaeans and Jews. Of the latter there are about 1900, engaged in trade and commerce. Fewest in number are the Turks, comprising only the officials. Most numerous are the Arabs, chiefly Shi'ites. The wealthiest and most influential personage in the capital and the vilayet is the nakib, or marshal of the nobility (i.e. descendants of the family of the prophet, who are entitled to wear the green turban). Basra is a station of the Arabian mission of the Dutch Reformed Church of America.

History.—The original city of Basra was founded by the caliph Omar in A.D. 636 about 8 m. S.W. of its present site, on the edge of the stony and pebbly Arabian plateau, on an ancient canal now dry. The modern town of Zobeir, a sort of health suburb, occupied by the villas of well-to-do inhabitants of Basra, lies near the ruin mounds which mark the situation of the ancient city. In the days of its prosperity it rivalled Kufa and Wasit in wealth and size, and its fame is in the tales of the Arabian Nights. With the decay of the power of the Abbasid caliphate its importance declined. The canals were neglected, communication with the Persian Gulf was cut off and finally the place was abandoned altogether. The present city was conquered by the Turks in 1668, and since that period has been the scene of many revolutions. It was taken in 1777 after a siege of eight months by the Persians under Sadik Khan. In about a year it fell again into the hands of the Turks, who were again deprived of it by the sheikh of the Montefik (Montafiq) Arabs. The town was in the October following recovered by Suleiman Pasha, who encountered the sheikh on the banks of the Euphrates and put him to flight; it has since remained in the hands of the Turks.

BASS, the name of a family of English brewers. The founder of the firm, William Bass (b. 1720), was originally a carrier, one of his chief clients being Benjamin Printon, a Burton-on-Trent brewer. By 1777 Bass had saved a little money, and seeing the growing demand for Burton beer he started as a brewer himself. The principal market for Burton beer at that time was in St Petersburg, whither the beer could be sent by water direct from Burton via the Trent and Hull, and William Bass managed to secure a tolerable share of the large Russian orders. But in 1822 the Russian government placed a prohibitory duty on Burton ales, and the Burton brewers were forced into cultivating the home market. William Bass opened up a connexion with London, and established a fairly profitable home trade. A misunderstanding between the East India Company and the London brewers who were the proprietors of Hodgson's India Pale Ale, at that time the standard drink of Englishmen in the East, resulted in Bass being asked to supply a beer which would withstand the Indian climate and be generally suitable to the Indian market. After a series of experiments he produced what is still known as Bass's pale ale. This new and lighter beer at once became popular all over India, and Bass's firm became the largest in Burton. After William Bass's death the business was carried on by his son, M. T. Bass, and then by his grandson, Michael Thomas Bass (1799-1884). In 1827 a vessel laden with Bass's beer was wrecked in the Irish Channel. A large proportion of the cargo was however salved and sold at Liverpool, where it met with great approval in the local market, and through this chance circumstance the firm opened up a regular trade in the north-west of England and Ireland. "Bass" was, however, little drunk in London till 1851, when it was supplied on draught at the Exhibition of that year, since which time its reputation has been world-wide. In 1880 the business was turned into a limited liability company. Michael Thomas Bass, besides actively conducting and extending the firm's operations, was a man of great public spirit and philanthropy, and the towns of Burton and Derby are largely indebted to his munificence. He took a keen interest in all questions affecting the welfare of the working classes, and was largely instrumental in securing the abolition of imprisonment for debt. On his death, prior to which he had taken into partnership Messrs Ratcliff and Gretton, two of the leading officials of the brewery, converting the business into a limited company known as Messrs Bass, Ratcliff & Gretton, Ltd., the control of the firm passed to his sons, Michael Arthur Bass and Hamar Bass (d. 1898). Michael Arthur Bass (1837-1909), after twenty-one years in parliament as member first for Stafford, then for two divisions of Staffordshire, was in 1886 raised to the peerage as Baron Burton; by a special patent of 1897 the peerage descended to his daughter, Nellie, the wife of Mr J. E. Baillie of Dochfour, the baronetcy

BASS (the same word as "base," and so pronounced, but influenced in spelling by the Ital. *basso*), deep, low; especially in music, the lower part in the harmony of a composition, the lowest male voice, or the lowest-pitched of a class of instruments, as the bass-clarinet.

Bass or bast (a word of doubtful origin, pronounced $b\check{a}s$) is the fibrous bark of the lime tree, used in gardening for tying up plants, or to make mats, soft plaited baskets, &c. Basswood is the American lime-tree, Tilia Americana; white basswood is T. heterophylla.

The name bass is also given to a fish closely resembling the perch.

descending to his nephew W. A. Hamar Bass (b. 1879).

BASSA, a province of the British protectorate of Northern Nigeria, occupying the angle made by the meeting of the Benue river with the Niger. It has an area of 7000 sq. m., with a population estimated at about one and a half millions. It is bounded N. by the Benue, W. by the Niger, S. by the frontier of Southern Nigeria, and E. by the province of Muri. The province is heavily forested, and is estimated to be one of the richest of the protectorate in natural products. It has never been penetrated by Moslem influence, and is inhabited in the greater part by warlike and unruly pagans. Early in the 16th century the Igbira (Okpoto or Ibo) were one of the most powerful pagan peoples of Nigeria and had their capital at Iddah. At a later period the Bassas conquered the western portion of the state and the Munshis the eastern, while the Okpoto still held the south and a wedge-shaped district partially dividing the Munshis and Bassas. The Bassas are a very remarkable pagan race who permeate the entire protectorate of Northern Nigeria, and are to be found in small colonies in almost every province. They are clever agriculturists, naturally peaceful and industrious. The Munshis, though also good agriculturists, are a warlike and most unruly race, as are also the Okpoto.

The districts which now comprise the province of Bassa came nominally under British control in 1900, but up to the year 1903 administrative authority was confined to the western half with Dekina (in 7° 3′ E., 7° 41′ N.) for its capital. In December of 1903 a disturbance resulting in the murder of the British resident led to the despatch of a military expedition, and as a result of the operations the frontiers of the districts under control were extended to the borders of the Munshi country in about 8° E. The western portion of the province, occupied by friendly and peaceful tribes upon the Niger, has been organized for administration on the same system as the rest of the protectorate. Courts of justice are operative and taxes are peacefully collected. The Okpoto, however, remain turbulent, as do their neighbours the Munshis. Spirits, of which the importation is forbidden in Northern Nigeria, are freely smuggled over the border from Southern Nigeria. Arms and powder are also imported. The slave-trade is still alive in this district, and an overland route for slaves is believed to have been established through eastern Bassa to the Benue. In consequence of the natural wealth of the province, there are trading establishments of the Niger Company and of Messrs Holt on the Niger and Benue, and colonies of native traders have penetrated the country from the north. Roman Catholic and Protestant missions are established at Dekina and Gbebe.

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BASSANO, JACOPO DA PONTE (1510-1592), Venetian painter, was born at Bassano. He was educated by his father, who was himself an artist, and then completed his studies at Venice. On the death of his father he returned to Bassano and settled there. His subjects were generally peasants and villagers, cattle and landscapes, with some portraits and historical designs. His figures are well designed, and his animals and landscapes have an agreeable air of simple nature. His compositions, though they have not much eloquence or grandeur, have abundance of force and truth; the local colours are well observed, the flesh-tints are fresh and brilliant, and his chiaroscuro and perspective are unexceptionable. He is said to have finished a great number of pictures; but his genuine works are somewhat rare and valuable—many of those which are called originals being copies either by the sons of Bassano or by others. Bassano's style varied considerably during his lifetime. He naturally was at first a copier of his father, but his productions in this style are not of great value. He was then strongly attracted by the lightness and beautiful colouring of Titian, and finally adopted the style which is recognized as his own. Although he painted few great pictures, and preferred humble subjects, yet his altar-piece of the Nativity at Bassano is estimated highly by the best judges, and in Lanzi's opinion is the finest work of its class.

BASSANO, a city of Venetia, Italy, in the province of Vicenza, 24 m. N.E. of Vicenza and 30 m. N. of Padua by rail, at the foot of the Venetian Alps. Pop. (1901) town, 7553; commune, 15,097. It is well situated upon the Brenta, which is here spanned by a covered wooden bridge, and commands fine views. The castle, erected by the Ezzelini in the 13th century, lies in the upper portion of the town, above the river; a tower, erected by a member of the same family, is a conspicuous feature. The museum and cathedral and some of the other churches contain pictures by the da Ponte family (16th and early 17th century), surnamed Bassano from their birth-place; Jacopo is the most eminent of them. The museum also contains drawings and letters of the sculptor Antonio Canova. The church of S. Francesco, begun in the 12th century in the Lombard Romanesque style, was continued in the 13th in the Gothic style. Some of the houses have traces of paintings on their façades. In the 11th century Eccelin, a German, obtained fiefs in this district from Conrad II. and founded the family of the Ezzelini, who were prominent in the history of North Italy in the 13th and 14th centuries. Bassano apparently came into existence about A.D. 1000. Its possession was disputed between Padua and Vicenza; it passed for a moment under the power of Gian Galeazzo Visconti of Milan, who fortified it. At the beginning of the 15th century it went over to Venice; its industries flourished under Venetian government, especially its printingpress and manufacture of majolica, the latter of which still continues. On the 8th of September 1796 an action was fought here between the French and the Austrians, in which the French were victorious.

(T. As.)

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BASSARAB or Bassaraba, the name of a dynasty in Rumania, which ruled Walachia from the dawn of its history until 1658. The origin of the name and family has not yet been explained. It undoubtedly stands in close connexion with the name of the province of Bessarabia, which oriental chroniclers gave in olden times to the whole of Walachia. The heraldic sign, three heads of negroes in the Bassarab shield, seems to be of late western origin and to rest on a popular etymology connecting the second half of the word with Arabs, who were taken to signify Moors (blacks). The other heraldic signs, the crescent and the star, have evidently been added on the same supposition of an oriental origin of the family. The Servian chroniclers connect its origin with their own nationality, basing this view upon the identification of Sarab with Sorb or Serbia. All this is mere conjecture. It is, however, a fact that the first appearance of the Bassarabs as rulers (knyaz, ban or voivod) is in the western part of Rumania (originally called Little Walachia), and also in the southern parts of Transylvania—the old dukedoms of Fogarash and Almash, which are situated on the right bank of the Olt (Aluta) and extend south to Severin and Craiova. Whatever the origin of the Bassarabs may be, the foundation of the Walachian principality is undoubtedly connected with a member of that family, who, according to tradition, came from Transylvania and settled first in Câmpulung and Tîrgovishtea. It is equally certain that almost every one of the long line of princes and voivods bore a Slavonic surname, perhaps due to the influence of the Slavonic Church, to which the Rumanians belonged. Starting from the 13th Century the Bassarabs soon split into two rival factions, known in history as the descendants of the two brothers Dan and Dragul. The form Drakul-devil-by which this line is known in history is no doubt a nickname given by the rival line. It has fastened on the family on account of the cruelties perpetrated by Vlad Drakul (1433-1446) and Vlad Tsepesh (1456-1476), who figure in popular legend as representatives of the most fiendish cruelty. The feud between the rival dynasties lasted from the beginning of the 15th century to the beginning of the 17th.

The most prominent members of the family were Mircea (1386-1418), who accepted Turkish suzerainty; Neagoe, the founder of the famous cathedral at Curtea de Argesh (*q.v.*); Michael, surnamed the Brave (1592-1601); and Petru Cercel, famous for his profound learning, who spoke twelve languages and carried on friendly correspondence with the greater scholars and poets of Italy. He was drowned by the Turks in Constantinople in 1590 through the intrigues of Mihnea, who succeeded him on the throne of Walachia. The British Museum possesses the oldest MSS. of the Rumanian Gospels, once owned by this Petru Cercel, and containing his autograph signature. The text was published by Dr M. Caster at the expense of the Rumanian government. Mateiu Bassarab (1633-1654) established the first printing-press in Rumania, and under his influence the first code of laws was compiled and published in Bucharest in 1654. The Bassarab dynasty became extinct with Constantine Sherban in 1658. See Rumania: *Language and Literature*.

BASS CLARINET (Fr. clarinette basse; Ger. Bass-Klarinette; Ital. clarinetto basso or darone), practically the A, B_b or C clarinet speaking an octave lower; what therefore has been said concerning the fingering, transposition, acoustic properties and general history of the clarinet (q.v.) also applies to the bass clarinet. Owing to its greater length the form of the bass clarinet differs from that of the clarinets in that the bell joint is bent up in front of the instrument, terminating in a large gloxinea-shaped bell, and that the mouthpiece is attached by means of a strong ligature and screws to a serpent-shaped crook of brass or silver. The compass of the modern orchestral bass clarinet is in the main the same as that of the higher clarinets in C, B_b

and A, but an octave lower, and therefore for the bass clarinet in C is



; for the bass clarinet in B_b the real sounds are one tone, and for the bass clarinet in A $1\frac{1}{2}$ tone lower, although the notation is the same for all three.

Sometimes the treble clef is used in notation for the bass clarinet. It must then be understood that the instrument in C speaks an octave lower, the bass clarinet in B_b a major ninth and the bass clarinet in A a minor tenth lower. The tenor clef is also frequently used in orchestral works.

The quality of tone is less reedy in the bass clarinet than in the higher instruments. It resembles the bourdon stop on the organ, and in the lowest register, more especially, the tone is somewhat hollow and wanting in power although mellower than that of the bassoon. In the lowest octave the instrument speaks slowly and is chiefly used for sustained bass or melody notes; rapid passages are impossible.

The modern orchestral model may be fitted with almost every kind of key-mechanism, including the Boehm, and the degree of perfection and ingenuity attained has removed the all but insuperable difficulties which stood in the way of the original inventors who, not understanding key-work, made many futile attempts to bridge the necessarily great distance between the fingerholes by making the bore serpentine, boring the holes obliquely, &c.

The low pitch of the bass clarinet (8 ft. tone) contrasted with the moderate length of the instrument—whose bore measures only some 42 to 43 inches from mouthpiece to bell, whereas that of the bassoon, an instrument of the same pitch, is twice that length—is a puzzle to many. An explanation of the fact is to be found in the peculiar acoustic properties of the cylindrical tube played by means of a reed mouthpiece characterizing the clarinet family, which acts as a closed pipe speaking an octave lower than an open pipe of the same length, and overblowing a twelfth instead of an octave. This is more fully explained in the articles Clarinet and Aulos.

The construction of the bass clarinet demands the greatest care. The bore should theoretically be strictly cylindrical throughout its length from mouthpiece to bell joint; the slightest deviation from mathematical accuracy, such as an undue widening of the bell from the point where it joins the body to the mouth of the bell, would tend to muffle the lower notes of the instrument and to destroy correct intonation.

The origin of the bass clarinet must be sought in Germany, where Heinrich Grenser of Dresden, one of the most famous instrument-makers of his day, made the first bass clarinet in 1793. The basset horn (q.v.) or tenor clarinet, which had reached the height of its popularity, no doubt suggested to Grenser, who was more especially renowned for his excellent fagottos, the possibility of providing for the clarinet a bass of its own. One of these earliest attempts in the form of a fagotto, stamped "A. Grenser, Dresden," with nine square-flapped brass keys working on knobs, is in the Grossherzogliches Museum at Darmstadt and was lent to the Royal Military Exhibition, London 1890.^[1] Two other early specimens, belonging originally to Adolphe Sax and to M. de Coussemaker, are now respectively preserved in the museums of the Brussels Conservatoire and of the Berlin Hochschule (Snoeck Collection). The tubes are of great thickness and the holes are bored obliquely through the walls. Both instruments are in A.

Attempts were made in Italy to overcome the mechanical difficulties by making the bore of the bass clarinet serpentine. A specimen by Nicolas Papalini of Pavia^[3] in the museum of the Brussels Conservatoire has the serpentine bore pierced through two slabs of pear-wood; the two halves, each forming a vertical section of the instrument, are fitted together with wooden pins. The outside length is only 2 ft. $3\frac{1}{2}$ in. and there are nineteen finger-holes.

Joseph Uhlmann of Vienna^[4] constructed a bass clarinet, also termed "bass basset horn," with twenty-three keys and a compass from B_b through four complete octaves with all chromatic semitones. These instruments resemble the saxophones (q.v.), having the bell joint bent up in front and the crook almost at right angles backwards, but the bore of the saxophone is conical.

Georg Streitwolf (1779-1837), an ingenious musical instrument-maker of Göttingen, produced in 1828 a bass clarinet with a compass extending from Ab to F, nineteen keys and a fingering the same as that of the clarinet with but few exceptions. In form it resembled the fagotto and had a crook terminating in a beak mouthpiece. The Streitwolf bass clarinet was adopted in 1834 by the Prussian infantry as bass to the wood-wind. [5] Streitwolf's first bass clarinets were in C, but later he constructed instruments in Bb as well. Like the basset horn, Streitwolf's instruments had the four chromatic open keys extending the compass downwards to Bb. The tone was of very fine

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quality. One of these instruments is in the possession of Herr C. Kruspe of Erfurt,^[6] and another is preserved in the Berlin collection at the Hochschule.

It was, however, the successive improvements of Adolphe Sax (Paris, 1814-1894), working probably from Grenser's and later from Streitwolf's models, which produced the modern bass clarinet, and following up the work of Halary and Buffet in the same field, he secured its introduction into the orchestra at the opera. The bass clarinet in C made its first appearance in opera in 1836 in Meyerbeer's *Huguenots*, Act V., where in a fine passage the lower register of the instrument is displayed to advantage, and later in *Dinorah* (*Le pardon de Ploermel*). Two years later (1838) at the theatre of Modena a bass clarinet by P. Maino of Milan, differing in construction from the Sax model, was independently introduced into the orchestra.^[7] Wagner employed the bass clarinet in Bb and C in *Tristan und Isolde*, where at the end of Act II. it is used with great effect to characterize the reproachful utterance of King Mark, thus:



etc.

(K. S.)

- [1] See Captain C. R. Day, Descriptive Catalogue (London, 1891), No. 266, p. 125.
- [2] See Victor Mahillon, Catalogue descriptif, vol. ii. (1896), pp. 224-226, No. 940.
- [3] See Captain C. R. Day, op. cit. p. 123, pl. v. B. and p. 123, No. 262.
- [4] See Dr Schafhäutl's report on the Munich exhibition, *Bericht der Beurtheilungscommission für Musikinstrumente* (Munich, 1855), P. 153.
- [5] See Allgemeine musikalische Zeitung (Leipzig, 1834), Bd. xxxvi. March, p. 193.
- [6] See Wilhelm Altenburg, Die Klarinette (Heilbronn, 1904-1905), p. 33.
- [7] See W. Altenburg, op. cit. p. 34.
- [8] Orchestral score, p. 284.

BASSEIN, a district and town in the Irrawaddy division of Lower Burma, in the delta of the Irrawaddy. The district has been reduced to 4127 sq. m., from 8954 sq. m. in 1871, having given up a large tract to the district of Myaungmya formed in 1896.

A mountain range called the Anauk-pet Taungmyin stretches through the district from N. to S. along the coast. The principal river of the district is the Irrawaddy, which debouches on the sea at its eastern extremity through a delta intersected with salt water creeks, among which the Pyamalaw, Pyinzalu, Kyuntôn, and Ngawun Shagègyi or Bassein river rank as important arms of the sea. Irrawaddy and Inyègyi are the only two lakes in the district. The delta of the Irrawaddy forms, wherever cultivable, a vast sheet of rice, with cotton, sesamum, and tobacco as subsidiary crops. In 1901 the population was 391,427.

Bassein, the chief town and port, is the capital of the district and division, and is situated on the eastern bank of the Bassein river, one of the main arteries by which the waters of the Irrawaddy discharge themselves into the sea. It forms an important seat of the rice trade with several steam rice mills, and has great capabilities both from a mercantile and a military point of view, as it commands the great outlet of the Irrawaddy. It fell before the British arms, in May 1852, during the second Burmese war. In 1901 it had a population of 31,864. The vessels of the Irrawaddy Flotilla Company ply between Rangoon and Bassein, &c., by inland waters, and a railway opened in 1903 runs northeastward through the centre of the district, to Henzada and Letpadan.

BASSELIN, OLIVIER (c. 1400-c. 1450), French poet, was born in the Val-de-Vire in Normandy about the end of the 14th century. He was by occupation a fuller, and tradition still points out the site of his mill. His drinking songs became famous under the name of Vaux-de-Vire, corrupted in modern times into "vaudeville." From various traditions it may be gathered that Basselin was killed in the English wars about the middle of the century, possibly at the battle of Formigny (1450). At the beginning of the 17th century a collection of songs was published by a Norman lawyer, Jean Le Houx, purporting to be the work of Olivier Basselin. There seems to be very little doubt that Le Houx was himself the author of the songs attributed to Basselin, as well as of those he acknowledged as his own.

It has been suggested that Basselin's name may be safely connected with some songs preserved in the *Bibliothèque Nationale* at Paris, and published at Caen in 1866 by M. Armand Gasté. The question is discussed in M. V. Patard's *La Vérité dans la question Olivier Basselin et Jean le Houx à propos du Vau-de-Vire* (1897). A. Gasté's edition (1875) of the *Vaux-de-Vire* was translated (1885) by J. P. Muirhead.

BASSES-ALPES, a department of south-eastern France, formed in 1790 out of the northern portion of Provence. It is bounded N. by the department of the Hautes Alpes, E. by Italy and the department of the Alpes Maritimes, S. by that of the Var, and W. by those of Vaucluse and the

Drôme. Its area is about 2698 sq. m., while its greatest length is 89½ m. and its greatest breadth 56 m. Pop. (1906) 113,126. The river Durance passes through the western part of this department, receiving (left), as affluents, the Ubaye, the Bléone and the Asse (the entire course of each of these rivers is included within the department) as well as the Verdon, the upper course of which is within the department, while the lower course forms its southern limit. It is a poor and hilly district, the highest summits (the loftiest is the Aiguille de Chambeyron, 11,155 ft.) rising round the head waters of the Ubaye. The department is divided into five arrondissements (Digne, Barcelonnette, Castellane, Forcalquier, and Sisteron), 30 cantons and 250 communes. It forms the bishopric of Digne, formerly in the ecclesiastical province of Embrun, but since 1802 in that of Aix-en-Provence. Its chief towns are Digne, Barcelonnette, Castellane, Forcalquier, and Sisteron. It is poorly supplied with railways (total length 109½ m.), the main line from Grenoble to Avignon running through it from Sisteron to Manosque, and sending off two short branch lines to Digne (14 m.) and to Forcalquier (9 m.). It is a poor department from the material point of view, being very mountainous and containing many mountain pastures. But these pastures have been much damaged by the Provençal shepherds to whom they are let out, while the forests have been very much thinned (though extensive reafforestments are now being carried out) so that the soil is very dry and made drier by exposure to the southern sun. From near the head of the Ubaye valley the pass of the Col de l'Argentière (6545 ft.) leads over from Barcelonnette to Cuneo, in Italy; it was perhaps traversed by Hannibal, and certainly in 1515 by Francis I.

See C. J. J. M. Féraud, *Histoire, géographie et statistique du Département des Basses-Alpes* (Digne, 1861).

(W. A. B. C.)

BASSES-PYRÉNÉES, a department of south-western France, at the angle of the Bay of Biscay, formed in 1790, two-thirds of it from Béarn and the rest from three districts of Gascony-Basse-Navarre, Soule and Labourd. The latter constitute the Basque region of France (see Basques) and cover the west of the department. Basses-Pyrénées is bounded N. by Landes and Gers, E. by Hautes-Pyrénées (which has two enclaves forming five communes within this department), S. by Spain, and W. by the Atlantic Ocean. Pop. (1906) 426,817. Area, 2977 sq. m. The whole of the south of the department is occupied by the western and lower summits of the Pyrenees. The remainder consists of a region of heaths and plateaus to the northeast of the Gave de Pau, and of hills divided by numberless fertile valleys to the west of that river. The height of the mountains of the southern frontier increases gradually from west to east. The peak of the Rhune, to the south of St Jean de Luz, rises only to 2950 ft.; and on the border of the Basque country the mean height of the summits is not much greater. The peak of Orhy alone, in the south of the valley of Mauléon, reaches 6618 ft. But beyond that of Anie (8215 ft.), on the meridian of Orthez, which marks the boundary of Béarn, much loftier elevations appear,-Mourrous (9760 ft.), on the border of Hautes-Pyrénées, and the southern peak of Ossau (9465 ft.). The frontier between France and Spain, for the most part, follows the crest-line of the main range. Forts guard the upper valleys of the Nive and the Aspe, along which run important passes into Spain. The general direction of the rivers of the department is towards the north-west. The streams almost all meet in the Adour through the Gave de Pau, the Bidouze, and the Nive. In the north-east the two Luys flow directly to the Adour, which they join in Landes. In the south-west the Nivelle and the Bidassoa flow directly into the sea. The lower course of the Adour forms the boundary between Basses-Pyrénées and Landes; it enters the sea a short distance below Bayonne over a shifting bar, which has often altered the position of its mouth. The Gave de Pau, a larger stream than the Adour, passes Pau and Orthez, but its current is so swift that it is only navigable for a few miles above its junction with the Adour. On the left it receives the Gave d'Oloron, formed by the Gave d'Ossau, descending from the Pic du Midi, and the Gave d'Aspe, which rises in Spain. An important affluent of the Gave d'Oloron, the Saison or Gave de Mauléon, descends from the Pic d'Orhy. From the Pic des Escaliers, which rises above the forest of Iraty, the Bidouze descends northwards; while the forest, though situated on the southern slope of the chain, forms a part of French territory. The Nive, a beautiful river of the Basque country, takes its rise in Spain; after flowing past St Jean-Pied-de-Port, formerly capital of French Navarre and fortified by Vauban to guard the pass of Roncevaux, it joins the Adour at Bayonne. The Nivelle also belongs only partly to France and ends its course at St Jean-de-Luz. The Bidassoa, which is only important as forming part of the frontier, contains the Ile des Faisans, where the treaty of the Pyrenees was concluded (1659), and debouches between Hendaye (France) and Fuenterrabia (Spain).

The climate of the department is mild and it has an abundant rainfall, partly due to the west wind which drives the clouds from the gulf of Gascony. The spring is rainy; the best seasons are summer and autumn, the heat of summer being moderated by the sea. The winters are mild. The air of Pau agrees with invalids and delicate constitutions, and St Jean-de-Luz and Biarritz are much frequented by winter visitors.

Despite extensive tracts of uncultivated land, the department is mainly agricultural. Maize and wheat are the chief cereals; potatoes, flax and vegetables are also produced. Pasture is abundant, and horses, cattle, sheep and pigs are largely reared. The vine is grown on the lower slopes sheltered from the north wind, the wines of Jurançon, near Pau, being the most renowned. Of the fruits grown, chestnuts, cider-apples, and pears are most important. About one-thirteenth of the department consists of woods, a very small proportion of which belong to the government, the rest to the communes and private individuals.

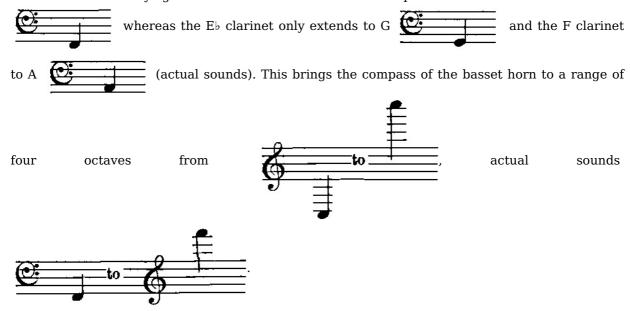
The department furnishes salt, building-stone, and other quarry products. There are mineral springs at Eaux-Bonnes, Eaux-Chaudes, Cambo-les-Bains (resorted to by the Basques on St John's

[v.03 p.0493]

Eve), St Christau, and Salies. At Le Boucau, 3 m. from Bayonne, there are large metallurgical works, the Forges de l'Adour, and chemical works. The manufactures of the department include woollen caps and sashes, cord slippers, chocolate, and paper, and there are also tanneries, sawand flour-mills. "Bayonne hams" and other table delicacies are prepared at Orthez. There is a considerable fishing population at Bayonne and St Jean-de-Luz. Bayonne is the principal port. Exports consist chiefly of timber, mine-props, minerals, wine, salt and resinous products. Coal, minerals, phosphates, grain and wool are leading imports. The interior commerce of the department is, however, of greater importance to its inhabitants; it takes the form of exchange of products between the regions of mountain and plain. The railway lines of Basses-Pyrénées, the chief of which is that from Bayonne to Toulouse via Orthez and Pau, belong to the Southern Company. The Adour, the Nive and the Bidouze are navigable on their lower courses. The department has five arrondissements-Pau, Bayonne, Oloron, Orthez and Mauléon, divided into 41 cantons and 559 communes. It constitutes the diocese of Bayonne, comes within the educational circumscription (académie) of Bordeaux and belongs to the district of the XVIII. army corps. Pau, the capital and seat of a court of appeal, Bayonne, Oloron, Biarritz, Orthez, Eaux-Bonnes, and St Jean-de-Luz are the principal towns. The following places are also of interest:— Lescar, which has a church of the 12th and 16th century, once a cathedral; Montaner, with a stronghold built in 1380 by Gaston Phoebus, count of Foix and viscount, of Béarn; and Sauveterre, a town finely situated on the Gave d'Oloron, with an old bridge, remains of a feudal castle, and a church in the Romanesque and Gothic styles.

BASSET, or Bassette, a French game of cards played by five persons with a pack of fifty-two cards. Once very popular, it is now practically obsolete. It is said to be of Venetian origin and to have been introduced into France by Justiniani, the ambassador of Venice in the second half of the 17th century. It resembles lansquenet (q.v.) in a general way, in that it is played between a banker and several punters, the players winning or losing according as cards turned up match those already exposed or not.

BASSET HORN (Fr. Cor de Basset, or Cor de Bassette; Ger. Bassethorn, Basshorn; Ital. Corno di Bassetto), a wood-wind instrument, not a "horn," member of the clarinet family, of which it is the tenor. The basset horn consists of a nearly cylindrical tube of wood (generally cocus or boxwood), having a cylindrical bore and terminating in a metal bell wider than that of the clarinet. For convenience in reaching the keys and holes, the modern instrument is usually bent or curved either near the mouthpiece or at the bell, which is turned upwards. The older models were bent in the middle at an obtuse angle, and had at the bottom of the lower joint, near the bell, a wooden block, inside which the bore was reflexed, and bent down upon itself.^[1] The basset horn has the same fingering as the clarinet, and corresponds to the tenor of that instrument, being pitched a fifth below the clarinet in C. The alto clarinet in Eb is often substituted for the basset horn, especially in military bands, but the instruments differ in three particulars:—(1) The basset horn has a metal bell instead of the pear-shaped contracted bell of the alto clarinet. (2) The bore of the basset horn is wider than that of the alto clarinet in Eb, or of the tenor clarinet in F. (3) The tube of the basset horn is longer than that of the clarinet, and contains four additional long keys, worked by the thumb of the right hand, which in the clarinet is only used to steady the instrument. These keys give the basset horn an extended compass of two tones downwards to F



[v.03 p.0494]

Like the clarinet, the basset horn is a transposing instrument, its music being written a fifth higher than the actual sounds. The treble clef is used in notation for all but the lowest register. The technical capabilities of the basset horn are the same as for the clarinet, except that the extra low notes from A to F (actual sounds) can only be intoned slowly and *staccato*; the notes of the upper register being better represented in the clarinet are seldom used in orchestral music.

The tone of the basset horn is extremely reedy and rich, especially in the medium and low registers; the tone colour is similar to that of the clarinet without its brilliancy; it is mellow and sensuous, but slightly sombre, and therefore well adapted for music of an elegiac funereal

character.

The basset horn flourished mainly in Germany, where at the end of the 18th century it was the favourite solo instrument of many celebrated instrumentalists, such as Czerny, David, Lotz, Springer, &c. Among the great masters, Mozart seems to have been foremost in his appreciation of this beautiful instrument. In his Requiem, the reed family is represented by two basset horns having independent parts, and two bassoons. Mozart has also used the instrument with great effect in his opera La Clemenza di Tito, where he has written a fine obbligato for it in the aria "Non piu di Flori"; in Zauberflöte; and in chamber music, viz. short adagio for two basset horns and bassoon, and another for two clarinets and three basset horns (Series 10 of Breitkopf & Härtel's complete edition). Beethoven employed it in his Prometheus overture. Mendelssohn used it in military music, and in two concerted pieces for clarinet and basset horn with pianoforte accompaniment, in F and D min., opp. 113 and 114, dedicated to Heinrich and Carl Bärmann.

The archetypes of the basset horn are the same as those of the clarinet (q, v). The basset horn was the outcome of the desire, prevailing during the 16th and 17th centuries, to obtain complete families of instruments to play in concert. The invention of the basset horn in 1770 is attributed to a clarinet maker of Passau, named Horn, whose name was given to the instrument; [2] by a Fig. 1. (From misnomer, the basset horn became known in Italy as corno di bassetto, and in photographs lent France as cor de basset. In 1782, Theodore Lotz of Pressburg made some by M. Victor modifications in the instrument, which was further improved by two Mahillon.) instrumentalists of Vienna, Anton and Johann Stadler, and finally in 1812 by



Iwan Mueller, a famous clarinettist, who invented the alto clarinet in Eb from the basset horn, by giving the latter a construction and fingering analogous to those of the clarinet in Bb, which he took as his model, instead of the clarinet in C.

See J. G. H. Backofen, Anweisung zur Klarinette, nebst einer kurzen Abhandlung über das Basset-Horn, with illustration, p. 37 (Leipzig, Breitkopf & Härtel, 1803); Iwan Mueller, Anweisung zu der neuen Clarinette und der Clarinette-alto, nebst einigen Bemerkungen für Instrumentenmacher (Leipzig, Freidrich Hofmeister, 1826, with illustrations); Gottfried Weber, "Über Clarinette und Bassethorn," Cacilia, Band xi. pp. 35-37 (Mainz, 1834); Wilhelm Altenburg, Die Clarinette, ihre Entstehung und Entwickelung bis zur Jetztzeit in akustischer, technischer u. musikalischer Beziehung (Heilbronn, 1904), pp. 16-32; good heliogravures of early basset horns in Descriptive Catalogue of the Musical Instruments at the Royal Military Exhibition, London, 1890, compiled by Capt. C. R. Day (1891), pl. v.

(K. S.)

- [1] An instrument of this type, stamped "H. Grenser, S. Wiesner, Dresden," is in the collection of the Rev. F. W. Galpin, of Hatfield, Broad Oak.
- [2] Cantor Lectures on Musical Instruments, their Construction and Capabilities, by A. J. Hipkins, p. 15; Henri Lavoix, Histoire de l'instrumentation depuis le seizième siècle jusqu'à nos jours (Paris, 1878), on p. 123 the date is given as 1777.

BASSI, LAURA MARIA CATERINA (1711-1778), an Italian lady eminently distinguished for her learning, was born at Bologna in 1711. On account of her extraordinary attainments she received a doctor's degree, and was appointed professor in the philosophical college, where she delivered public lectures on experimental philosophy till the time of her death. She was elected member of many literary societies and carried on an extensive correspondence with the most eminent European men of letters. She was well acquainted with classical literature, as well as with that of France and Italy. In 1738 she married Giuseppe Verrati, a physician, and left several children. She died in 1778.

BASSI, UGO (1800-1849), Italian patriot, was born at Cento, and received his early education at Bologna. An unhappy love affair induced him to become a novice in the Barnabite order when eighteen years old. He repaired to Rome, where he led a life of study and devotion, and entered on his ministry in 1833. It was as a preacher that he became famous, his sermons attracting large crowds owing to their eloquence and genuine enthusiasm. He lived chiefly at Bologna, but travelled all over Italy preaching and tending the poor, so poor himself as to be sometimes almost starving. On the outbreak of the revolutionary movements in 1848, when Pope Pius IX. still appeared to be a Liberal and an Italian patriot, Bassi, filled with national enthusiasm, joined General Durando's papal force to protect the frontiers as army chaplain. His eloquence drew fresh recruits to the ranks, and he exercised great influence over the soldiers and people. When the pope discarded all connexion with the national movement, it was only Bassi who could restrain the Bolognese in their indignation. At Treviso, where he had followed Guidotti's volunteers against the Austrians, he received three wounds, delighted to shed his blood for Italy (12th of May, 1848). He was taken to Venice, and on his recovery he marched unarmed at the head of the volunteers in the fight at Mestre. After the pope's flight from Rome and the proclamation of the Roman republic, Bassi took part with Garibaldi's forces against the French troops sent to re-establish the temporal power. He exposed his life many times while tending the wounded under fire, and when Garibaldi was forced to leave Rome with his volunteers the faithful monk followed him in his wanderings to San Marino. When the legion broke up Garibaldi

escaped, but Bassi and a fellow-Garibaldian, Count Livraghi, after endless hardships, were captured near Comacchio. On being brought before the papal governor, Bassi said: "I am guilty of no crime save that of being an Italian like yourself. I have risked my life for Italy, and your duty is to do good to those who have suffered for her." The governor would have freed the prisoners; but he did not dare, and gave them over to an Austrian officer. They were escorted to Bologna, falsely charged before a court martial with having been found with arms in their hands (Bassi had never borne arms at all), and shot on the 8th of August, 1849. Bassi is one of the most beautiful figures of the Italian revolution, a gentle unselfish soul, who, although unusually gifted and accomplished, had an almost childlike nature. His execution excited a feeling of horror all over Italy.

Countess Martinengo gives a charming sketch of his life in her *Italian Characters* (2nd ed., London, 1901); see also Zironi, *Vita del Padre Ugo Bassi* (Bologna, 1879); F. Venosta, "Ugo Bassi, Martire di Bologna," in the *Pantheon dei Martiri Italiani* (Milan, 1863).

(L. V.*)

BASSIANUS, JOANNES, Italian jurist of the 12th century. Little is known of his origin, but he is said by Corolus de Tocco to have been a native of Cremona. He was a professor in the law school of Bologna, the pupil of Bulgarus (q.v.), and the master of Azo (q.v.). The most important of his writings which have been preserved in his Summary on the Authentica, which Savigny regarded as one of the most precious works of the school of the Gloss-writers. Joannes, as he is generally termed, was remarkable for his talent in inventing ingenious forms for explaining his ideas with greater precision, and perhaps his most celebrated work is his "Law-Tree," which he entitled Arbor Arborum, and which has been the subject of numerous commentaries. The work presents a tree, upon the branches of which the various kinds of actions are arranged after the manner of fruit. The civil actions, or actiones stricti juris, being forty-eight in number, are arranged on one side, whilst the equitable or praetorian actions, in number one hundred and twenty-one, are arranged on the other side. A further scientific division of actions was made by him under twelve heads, and by an ingenious system of notation the student was enabled to class at once each of the civil or praetorian actions, as the case might be, under its proper head in the scientific division. By the side of the tree a few glosses were added by Joannes to explain and justify his classification. His Lectures on the Pandects and the Code, which were collected by his pupil Nicolaus Furiosus, have unfortunately perished.

[v.03 p.0495]

BASSOMPIERRE, FRANÇOIS DE (1579-1646), French courtier, son of Christophe de Bassompierre (1547-1596), was born at the castle of Harrouel in Lorraine. He was descended from an old family which had for generations served the dukes of Burgundy and Lorraine, and after being educated with his brothers in Bavaria and Italy, was introduced to the court of Henry IV. in 1598. He became a great favourite of the king and shared to the full in the dissipations of court life. In 1600 he took part in the brief campaign in Savoy, and in 1603 fought in Hungary for the emperor against the Turks. In 1614 he assisted Marie de' Medici in her struggle against the nobles, but upon her failure in 1617 remained loyal to the King Louis XIII. and assisted the royalists when they routed Marie's supporters at Ponts-de-Cé in 1620. His services during the Huguenot rising of 1621-22 won for him the dignity of marshal of France. He was with the army of the king during the siege of La Rochelle in 1628, and in 1629 distinguished himself in the campaign against the rebels of Languedoc. In 1615 Bassompierre had purchased from Henri, duc de Rohan (1579-1638), the coveted position of colonel-general of the Swiss and Grisons; on this account he was sent to raise troops in Switzerland when Louis XIII. marched against Savoy in 1629, and after a short campaign in Italy his military career ended. As a diplomatist his career was a failure. In 1621 he went to Madrid as envoy extraordinary to arrange the dispute concerning the seizure of the Valteline forts by Spain, and signed the fruitless treaty of Madrid. In 1625 he was sent into Switzerland on an equally futile mission, and in 1626 to London to secure the retention of the Catholic ecclesiastics and attendants of Henrietta Maria, wife of Charles I. The personal influence of Henry IV. had deterred Bassompierre from a marriage with Charlotte de Montmorency, daughter of the constable Montmorency, afterwards princesse de Condé, and between 1614 and 1630 he was secretly married to Louise Marguerite, widow of Francois, prince de Conti, and through her became implicated in the plot to overthrow Richelieu on the "Day of Dupes" 1630. His share was only a slight one, but his wife was an intimate friend of Marie de' Medici, and her hostility to the cardinal aroused his suspicions. By Richelieu's orders, Bassompierre was arrested at Senlis on the 25th of February 1631, and put into the Bastille, where he remained until Richelieu's death in 1643. On his release his offices were restored to him, and he passed most of his time at the castle of Tillières in Normandy, until his death on the 12th of October 1646. He left a son, François de la Tour, by the princesse de Conti, and an illegitimate son, Louis de Bassompierre, afterwards bishop of Saintes. His Mémoires, which are an important source for the history of his time, were first published at Cologne in 1665. He also left an incomplete account of his embassies to Spain, Switzerland and England (Cologne, 1668) and a number of discourses upon various subjects.

The best edition of the *Mémoires* is that issued by the Société de l'Histoire de France (Paris, 1877); see also G. Tallemant des Reaux, *Historiettes de la princesse de Conti, et du maréchal de Bassompierre* (Paris, 1854-1860).

BASSOON (Fr. basson; Ger. Fagott; Ital. fagotto), a woodwind instrument with double reed mouthpiece, a member of the oboe (q.v.) family, of which it is the bass. The German and Italian names of the instrument were bestowed from a fancied resemblance to a bundle of sticks, the bassoon being the first instrument of the kind to be doubled back upon itself; its direct ancestor,

the bass pommer, 6 ft. in length, was quite straight. The English and French names refer to the pitch of the instrument as the bass of the wood-wind.

The bassoon is composed of five pieces, which, when fitted together, form a wooden tube about 8 ft. long (93 in.) with a conical bore tapering from a diameter of 1¾ in., at the bell, to 3/16 in. at the reed. The tube is doubled back upon itself, the shorter joint extending to about two-thirds of the length of the longer, whereby the height of the instrument is reduced to about 4 ft. The holes are brought into a convenient position for the fingers by the device of boring them obliquely through the thickness of the wood. The five pieces are:—(1) the bell; (2) the long joint, forming the upper part of the instrument when played, although its notes are the lowest in pitch; (3) the wing overlapping the long joint and having a projecting flap through which are bored three holes; (4) the butt or lower end of the instrument (when played) containing the double bore necessitated by the abrupt bend of the tube upon itself. Both bores are pierced in one block of wood, the prolongation of the double tube being usually stopped by a flat oval pad of cork in the older models, whereas the modern instruments have instead a Ushaped tube; (5) the crook, a narrow curved metal tube about 12 in. long, to which is attached the double reed forming the mouthpiece.

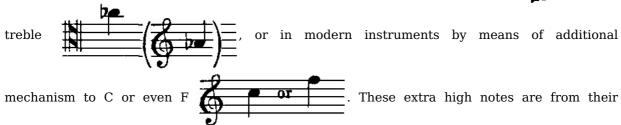
The performer holds the instrument in a diagonal position; the lower part of the tube (the butt joint) played by the right hand resting against his right thigh, and the little bell, turned upwards, pointing over his left shoulder; a strap round the neck affords additional support. The notes are produced by means of seven holes and 16, 17, or 19 keys. The mechanism and fingering are very intricate. Theoretically the whole construction of the bassoon is imperfect and arbitrary, important acoustic principles being disregarded, but these mechanical defects only enhance its value as an artistic musical instrument. The player is obliged to rely very much on his ear in order to obtain a correct intonation, and next to the strings no instrument gives greater scope to the artist.



Fig. 1.—Bassoon with 17 keys. Savary Model. (Rudall, Carte & Co.)

The bassoon has an eight foot tone, the compass extending from B_{\flat} bass [1]

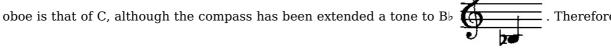




extreme sweetness called *vox humana*. The pitch of the bassoon apparently lies two octaves below that of the oboe, since the lowest note of both is B, but in reality the interval is only a twelfth, as may be ascertained by comparing their fundamental scales. On the bassoon the fundamental scale is that of F maj., obtained by opening and closing the holes; the notes



interlocking keys on the long joint, worked by the left thumb; they have no counterpart on the oboe and do not belong to the fundamental scale of the bassoon. The fundamental scale of the



[v.03 p.0496] the difference in pitch between the bassoon and the oboe is a twelfth. In the first register of the



keys in the long joint and bell; the next eight notes (holes and keys) each produce two sounds—the fundamental tone, and, by increased pressure of the breath, its harmonic octave. The remaining notes are obtained by cross fingering and by overblowing the notes of the fundamental



to Eb the *vox humana* notes are produced by the help of small harmonic holes opened by means of keys at the top of the wind joint; exceptional players obtain, without additional keys, two or more higher harmonic notes, which, however, are only used by *virtuosi*. This then forms the

intricate scheme of fingering for the bassoon, and in order to appreciate the efforts of such instrument makers as Carl Almenräder in Germany, Triebert and Jancourt in France, Sax in Belgium, Cornelius Ward and Morton in England, to introduce improvements based upon acoustic principles, it is necessary to understand what these general principles are, and why they have been disregarded in the bassoon. In all tubes the note given by the vibrating air column is influenced directly by the length of the tube, but very little, if at all, by the diameter of the bore. The pitch, however, is greatly affected by the diameter of the opening, whether lateral or at the bell, through which the vibrating column of air is again brought into communication with the outer air. The tube only sounds the normal note in proportion to its length, when the diameter of the lateral opening is equal to the internal diameter of the tube at the opening. As in most of our early wood-wind instruments the holes would in that case have been too large to be stopped by the fingers, and key-mechanism was still primitive, instrument-makers resorted to the expedient of substituting a hole of smaller diameter nearer the mouthpiece for one of greater diameter in the position the hole should theoretically occupy. This important principle was well understood by the Romans, and perhaps even by the ancient Greeks, as is proved by existing specimens of the aulos (q, v) and by certain passages from the classics.^[2]

Another curious acoustic phenomenon bears upon the construction of wind instruments, and especially upon the bassoon. When the diameter of the lateral opening or bell is smaller than that of the bore, the portion of the tube below the hole, which should theoretically be as though non-existent, asserts itself, lowering the pitch of the note produced at the hole and damping the tone;

this is peculiarly noticeable in the A of the bassoon



whose hole is much too high

and too small in diameter.^[3] To cite an example of the scope of Carl Almenräder's improvements in the bassoon, he readjusted the position of the A hole, stopped by the third finger of the right hand, boring lower down the tube, not one large hole, but two of medium diameter, covered by an open key to be closed by the same finger from the accustomed position; one of these A holes communicates with the narrower bore in the butt joint, and the other with the wider bore. The effect is a perfectly clear, full and accurate tone. Almenräder's other alterations were made on the same principle, and produced an instrument more perfect mechanically and theoretically than Savary's, but lacking some of the characteristics of the bassoon. In Germany Almenräder's improvements^[4] have been generally adopted and his model with 16 keys is followed by most makers, and notably by Heckel of Biebrich.^[5]

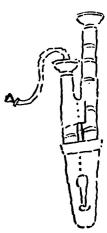
The unwieldy bass pommers of the 15th and 16th centuries led to many attempts to produce a more practical bass for the orchestra by doubling back the long tube of the instrument. Thus transformed, the pommer became a fagotto. The invention of the bassoon or fagotto is ascribed to Afranio, a canon of Ferrara, in a work by his nephew, Theseus Ambrosius Albonesius, entitled Introductio in Chaldaicam Linguam ... et descriptio ac Simulacrum Phagoti Afranii (Pavia, 1539). The illustration of the instrument, showing front and back views (p. 179), taken in conjunction with the detailed description (pp. 33-38), at once disposes of the suggestion that the phagotus of Afranio and the fagotto or bassoon were in any way related; the author himself is greatly puzzled as to the etymology of the word. The phagotus in fact, resembles nothing so much as the musical curiosity known as *flûte-à-bec à colonne*^[6], but double and played by bellows, assigned by G. Chouquet to the 16th century. This flute consisted of a column, with base and capital, both stopped, the vent and the whistle being concealed within perforated brass boxes, in the upper and lower parts of the column. Afranio's phagotus consisted of two similar twin columns with base and capital containing finger-holes and keys; between the columns in front was a shorter column for ornament, and at the back of it another still shorter whose capital could be lifted, and a sort of bellows or bag-pipe inserted by means of which the instrument was sounded. The first instrument was made, we are told, by Ravilius of Ferrara, from Afranio's design.^[7] Mersenne^[8], who does not seem to have any difficulty in understanding the construction of Afranio's phagotus, does not consider him the inventor of the fagotto or bassoon, but of another kind of fagotto which he classes with the Neapolitan sourdeline, a complicated kind of musette [9] (see Bag-Pipe). Afranio's instrument consists, he states, of two bassons as it were interconnected by tubes and blown by bellows. As in the sourdeline, these only speak when the springs (keys) are open. He disposes of Theseus Albonesius's fanciful etymology of the name by showing it to be nothing but the French word fagot, and that it was applied because the instrument consists of two or more "flutes," bound or fagotées together. There is no evidence that the phagotus contained a reed, which would account for Mersenne calling the pipes flutes. Mersenne's statements thus seem to uphold the theory that Afranio's phagotus was only a double flûte à colonne with bellows. Evidence is at hand that in 1555 a contrabass wind instrument was well known as fagotto. In the catalogue of the musical instruments belonging to the Flemish band of Marie de Hongrie in Spain, we find the following: "Ala dicha prinçesa y al dicho matoto dos ynstrumentos de musica contrabaxos, que llaman fagotes, metidos en dos caos redondas como pareçe por el dicho entrego."[10] Sigmund Schnitzer[11] of Nuremberg (d. 1578), a maker of wind instruments who attained considerable notoriety, has been named as the probable author of the transformation of pommer into bassoon.

[v.03 p.0497]

We learn from an historical work of the 18th century, that he was renowned "almost everywhere" as a maker of *fagotte* of extraordinary size, of skilful workmanship and pure intonation, speaking easily. Schnitzer's instruments were so highly appreciated not only all over Germany, but also in

An earlier chronicler of the artistic celebrities and craftsmen of Nuremberg, Johann Neudorfer, writing in 1549, [13] names Sigmund Schnitzer merely as Pfeifenmacher und Stadtpfeifer. Had he been also noted as an inventor of a new form of instrument, the fellow-citizen and contemporary chronicler would not have failed to note the fact. If Schnitzer had been the first to reduce the great length of the bass pommer by doubling the tube back upon itself, he would hardly have been handed down to posterity as the clever craftsman who made fagottos of extraordinary size; Doppelmaier, who chronicles in these eulogistic terms, wrote nearly two centuries after the supposed invention of the fagotto, the value of which was realized later by retrospection.

An explanation may perhaps be found in Eisel's statement about the Deutscher Basson, which he distinguishes from the Basson (our bassoon). "The Deutsche Bassons, Fagotte or Bombardi, as our German ancestors termed them, before music was clothed in Italian and French style, are no longer in use" (Eisel wrote in 1738) "and therefore it is unnecessary to waste paper on them."[14] This refers, of course, to the *bombard* or bass pommer, the extraordinarily long instruments which Schnitzer made so successfully. From this it would seem that our bassoon was not of German origin. In the meanwhile we get a clue to the early history of the pommer in transition, but we find it under a different name in no way connected with fagotto. In order to shorten the unwieldy proportions of the tenor pommer in C, and to increase its portability, it was constructed out of a block of wood of rather more than double the diameter of the pommer, in which two bores were cut, communicating at the bottom of the instrument which was flat. The bell and the crook containing the double reed mouthpiece were side by side at the top. This instrument, which had six holes in front and one at the back as well as two keys, was known as the dulceian, dolcian, douçaine, and also in Fig. 2.—Old English France as *courtaud* and in England as the *curtail*, *curtal*, [15] *curtoll*, &c., being mentioned in 1582—"The common bleting musick of ye Drone, Hobius (Hautboy) and Curtoll." The next step in the evolution produced the double curtail, a converted bass pommer an octave below the single curtail and



double curtail (before 1688). (From Harl MS 2034 in Brit.

therefore identical in pitch as in construction with the early fagotto in C. The instrument is shown in fig. 2, the reproduction of a drawing in the MS. of The Academy of Armoury by Randle Holme, [16] written some time before 1688. At the side of the drawing is the following description: "A double curtaile. [17] This is double the bigness of the single, mentioned ch. xvi. n. 6" (the MS. begins at ch. xvii. of bk. 3) "and is played 8 notes deeper. It is as it were 2 pipes fixed in on(e) thick bass pipe, one much longer than the other, from the top of the lower comes a crooked pipe of brass in which is fixed a reed, through it the wind passeth to make the instrument make a sound. It hath 6 holes on the outside and one on that side next the man or back part and 2 brass keys, the highest called double La sol re, and the other double B mi."

We may therefore conclude that the satirical name fagotto, presumably bestowed in Italy, since the French equivalent fagot was never used for the basson, was not necessarily applied to the new form of pommer at the outset, but in any case before 1555; that the very term Phagoto d'Afranio, by which the instrument was known during its short fabulous existence, with its pretended Greek etymology, presupposes the pre-existence in Italy of another fagotto with which Afranio was acquainted, perhaps imperfectly. Afranio's was the age of ingenious mechanical devices applied to musical instruments, many of which, like Afranio's, being mere freaks, did not survive the inventor. A document selected from the valuable archives published by Edm. van der Straeten^[18] suggests a satisfactory clue. In 1426 Louis Willay, a musical instrument maker of Bruges, sold to Philippe le Bon a triple set of wood-wind instruments, i.e. "4 bombardes, 4 douçaines and 4 flûtes," to be sent as a gift to Nicolas III., marquis of Ferrara. The new instrument, the douçaine, we may imagine, by its unusual appearance provoked the satirical wit of some courtier, and was henceforth known as fagotto. Just a century later Ravilius of Ferrara made Afranio's first phagotus from the inventor's design.

The bassoon has been a favourite with all the great masters, excepting Handel. Beethoven uses the bassoon largely in his symphonies, writing everywhere for it independent parts of great beauty and originality. Bach, in his mass in B min., has parts for two bassoons. Mozart wrote a concerto in Bb for bassoon, with orchestra (Kochel, No. 191). Weber has also written a concerto for bassoon in F (op. 75), scored for full orchestra.

See also Etienne Ozi, Nouvelle Methode du Bassoon (Paris, 1788 and 1800); J. B. J. Willent-Bordogny, Gran Methodo completo per il Fagotto (Milan, 1844), with illustrations of early bassoons (English edition, London, J. R. Lafleur & Son); Joseph Fröhlich, Vollständige Musikschule für alle beym Orchester gebrauchliche wichtigere Instrumente (many practical illustrations) (Cologne, Bonn, 1811); article "Bassoon," by W. H. Stone and D. J. Blaikley in Grove's Dictionary of Music and Musicians (2nd ed.); article "Fagott" in Mendel's Musikalisches Conversations-Lexikon; for the history of the instrument, and of its prototypes, see OBOE and BOMBARD.

(K. S.)

[1] At Wagner's instigation, the wind-instrument-maker, W. Heckel of Biebrich-am-Rhein, made bassoons with an extra key, extending the compass downwards to A.

- [2] Macrobius in Somn. Scip. lib. ii. cap. 4. 5.
- [3] Gottfried Weber, "Verbesserungen des Fagotts," in *Cacilia* (Mainz, 1825), vol. ii. p. 123.
- [4] See *Traité sur le perfectionnement du basson, avec 2 tableaux, par Charles Almenräder* (Mayence, Schott), and also the above mentioned article by Gottfried Weber in *Cacilia*, whose explanations are clearer than those of the inventor.
- [5] For a description of the modern instrument see Victor Charles Mahillon, *Catalogue descriptif et analytique du musée instrumental du Conservatoire Royal de Musique* (Bruxelles, 1896), vol. ii. pp. 275-276, No. 999.
- [6] As far as is known only three of these curious instruments are in existence; two in the museum of the Conservatoire, Paris, and one in Brussels; all three bear a trefoil as maker's mark; the smallest, in F, is reproduced in the *Catalogue of the Musical Instruments exhibited at the Royal Military Exhibition, London*, 1890, by Capt. C. R. Day (London, 1891), pl. iv. F. It is also described (without illustration) in Mahillon's *Catalogue*, p. 201, No. 189. The two flutes in Paris, measuring 73 cm. and 94 cm., are described by Gustave Chouquet, *Le Musée du Conservatoire National de Musique—Catalogue descriptif et raisonné* (Paris, 1884), Nos. 409 and 410, p. 106.
- [7] An Italian translation of the description is given by Count L. F. Valdrighi in *Musurgiana*, No. 4 (Milano, 1881), "Il Phagotus di Afranio," p. 40 et seq. (without illustration). An illustration of the phagotus is given by W. J. von Wasielewski in *Gesch. d. Instrumentalmusik im XVI. Jahrh.* (Berlin, 1878), pl. v. and vi., text p. 74.
- [8] See L'Harmonie universelle (Paris, 1636), part ii. p. 305.
- [9] Ibid., illustrated and described, bk. v. p. 293.
- [10] See Edm. van der Straeten, Hist. de la musique aux Pays-Bas, vol. vii. pp. 433, 436, 448
- [11] J. J. Quantz, Frederick the Great's flute-master, gives France the credit of transforming the bombard (pommer) into the bassoon, and the schalmey into oboe, see *Versuch einer Anweisung die Flote traversière zu spielen* (Berlin, 1752), p. 24 and again p. 241, § 6.
- [12] J. G. Doppelmaier, *Historische Nachricht von den Nürnbergischen Mathematicis und Künstlern* (Nürnberg, 1730), p. 293.
- [13] See "Nachrichten von Künstlern und Werkleuten Nürnbergs aus dem Jahre 1549," in R. Eitelberger von Edelberg's *Quellenschriften für Kunstgeschichte und Kunsttechnik des Mittelalters* (Vienna. 1875), vols. viii.-x.
- [14] See J. J. Eisel, *Musicus autodidactus oder der sich selbst informierende Musicus* (Erfurt, 1738), pp. 104 and 100, and also J. Mattheson, *Das neu-eröffnete Orchester* (Hamburg, 1713), "Basson," from whom Eisel borrowed.
- [15] See the New English Dictionary, and Bateman upon Bartholinus, 423, 1, margin.
- [16] British Museum, Harl. MS. 2034, fol. 207*b*, a reference communicated by Augustus Hughes-Hughes from his valuable appendix to part iii. (Instrumental Music and Works on Music) of a *Catalogue of MS. Music in the British Museum* (London, 1908-1909). The Appendix contains a list of typical musical instruments represented in illuminated MSS., or described in other MSS. in the British Museum, with a brief description and full references.
- [17] Compare Randle Holme's *double curtail* with the dolcian in C, pl. vi. H. of Capt. C. R. Day's catalogue, and with a dolcian or single curtail by J. C. Denner in Paul de Wit's *Katalog des Musikhistorischen Museums von Paul de Wit* (Leipzig, 1903), p. 127, No. 380, and illust. p. 121 (Collection now transferred to Cologne). Consult also Mersenne, *op. cit.*, and Michael Praetorius, *Syntagma Musicum* (Wolfenbüttel, 1618), both of whom describe and figure these forms of early bassoons.
- [18] Op. cit. vol. vii. p. 38.

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