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Geoponici to Germany (part)

Articles in This Slice

GEOPONICI,[1] or *Scriptores rei rusticae*, the Greek and Roman writers on husbandry and agriculture. On the whole the Greeks paid less attention than the Romans to the scientific study of these subjects, which in classical times they regarded as a branch of economics. Thus Xenophon's *Oeconomicus* (see also *Memorabilia*, ii. 4) contains a eulogy of agriculture and its beneficial ethical effects, and much information is to be found in the writings of Aristotle and his pupil Theophrastus. About the same time as Xenophon, the philosopher Democritus of Abdera wrote a treatise Περὶ Γεωργίας, frequently quoted and much used by the later compilers of *Geoponica* (agricultural treatises). Greater attention was given to the subject in the Alexandrian period; a long list of names is given by Varro and Columella, amongst them Hiero II. and Attalus III. Philometor. Later, Cassius Dionysius of Utica translated and abridged the great work of the Carthaginian Mago, which was still further condensed by Diophanes of Nicaea in Bithynia for the use of King Deïotarus. From these and similar works Cassianus Bassus (*q.v.*) compiled his *Geoponica*. Mention may also be made of a little work Περὶ Γεωργικῶν by Michael Psellus (printed in Boissonade, *Anecdota Graeca*, i.).

The Romans, aware of the necessity of maintaining a numerous and thriving order of agriculturists, from very early times endeavoured to instil into their countrymen both a theoretical and a practical knowledge of the subject. The occupation of the farmer was

regarded as next in importance to that of the soldier, and distinguished Romans did not disdain to practise it. In furtherance of this object, the great work of Mago was translated into Latin by order of the senate, and the elder Cato wrote his *De agri cultura* (extant in a very corrupt state), a simple record in homely language of the rules observed by the old Roman landed proprietors rather than a theoretical treatise. He was followed by the two Sasernae (father and son) and Gnaeus Tremellius Scrofa, whose works are lost. The learned Marcus Terentius Varro of Reate, when eighty years of age, composed his *Rerum rusticarum, libri tres*, dealing with agriculture, the rearing of cattle, and the breeding of fishes. He was the first to systematize what had been written on the subject, and supplemented the labours of others by practical experience gained during his travels. In the Augustan age Julius Hyginus wrote on farming and bee-keeping, Sabinus Tiro on horticulture, and during the early empire Julius Graecinus and Julius Atticus on the culture of vines, and Cornelius Celsus (best known for his *De medicina*) on farming. The chief work of the kind, however, is that of Lucius Junius Moderatus Columella (*q.v.*). About the middle of the 2nd century the two Quintilii, natives of Troja, wrote on the subject in Greek. It is remarkable that Columella's work exercised less influence in Rome and Italy than in southern Gaul and Spain, where agriculture became one of the principal subjects of instruction in the superior educational establishments that were springing up in those countries. One result of this was the preparation of manuals of a popular kind for use in the schools. In the 3rd century Gargilius Martialis of Mauretania compiled a *Geoponica* in which medical botany and the veterinary art were included. The *De re rustica* of Palladius (4th century), in fourteen books, which is almost entirely borrowed from Columella, is greatly inferior in style and knowledge of the subject. It is a kind of farmer's calendar, in which the different rural occupations are arranged in order of the months. The fourteenth book (on forestry) is written in elegiacs (85 distichs). The whole of Palladius and considerable fragments of Martialis are extant.

The best edition of the *Scriptores rei rusticae* is by J.G. Schneider (1794-1797), and the whole subject is exhaustively treated by A. Magerstedt, *Bilder aus der römischen Landwirtschaft* (1858-1863); see also Teuffel-Schwabe, *Hist. of Roman Literature*, 54; C.F. Bähr in Ersch and Gruber's *Allgemeine Encyklopädie*.

1 The latinized form of a non-existent Γεωπονικοί, used for convenience.

GEORGE, SAINT (d. 303), the patron saint of England, Aragon and Portugal. According to the legend given by Metaphrastes the Byzantine hagiologist, and substantially repeated in the Roman *Acta sanctorum* and in the Spanish breviary, he was born in Cappadocia of noble Christian parents, from whom he received a careful religious training. Other accounts place his birth at Lydda, but preserve his Cappadocian parentage. Having embraced the profession of a soldier, he rapidly rose under Diocletian to high military rank. In Persian Armenia he organized and energized the Christian community at Urmi (Urumiah), and even visited Britain on an imperial expedition. When Diocletian had begun to manifest a pronounced hostility towards Christianity, George sought a personal interview with him, in which he made deliberate profession of his faith, and, earnestly remonstrating against the persecution which had begun, resigned his commission. He was immediately laid under arrest, and after various tortures, finally put to death at Nicomedia (his body being afterwards taken to Lydda) on the 23rd of April 303. His festival is observed on that anniversary by the entire Roman Catholic Church as a semi-duplex, and by the Spanish Catholics as a duplex of the first class with an octave. The day is also celebrated as a principal feast in the Orthodox Eastern Church, where the saint is distinguished by the titles μεγαλόμαρτυρ and τροπαιοφόρος.

The historical basis of the tradition is particularly unsound, there being two claimants to the name and honour. Eusebius, *Hist. eccl.* viii. 5, writes: "Immediately on the promulgation of the edict (of Diocletian) a certain man of no mean origin, but highly esteemed for his temporal dignities, as soon as the decree was published against the churches in Nicomedia, stimulated by a divine zeal and excited by an ardent faith, took it as it was openly placed and posted up for public inspection, and tore it to shreds as a most profane and wicked act. This, too, was done when the two Caesars were in the city, the first of whom was the eldest and chief of all and the other held fourth grade of the imperial dignity after him. But this man, as the first that was distinguished there in this manner, after enduring what was likely to follow an act so daring, preserved his mind, calm and serene, until the moment when his spirit fled." Rivalling this anonymous martyr, who is often supposed to have been St George, is an earlier martyr briefly mentioned in the *Chronicon Pascale*: "In the year 225 of the Ascension of our Lord a

persecution of the Christians took place, and many suffered martyrdom, among whom also the Holy George was martyred."

Two Syrian church inscriptions bearing the name, one at Ezr'a and the other at Shaka, found by Burckhardt and Porter, and discussed by J. Hogg in the *Transactions of the Royal Literary Society*, may with some probability be assigned to the middle of the 4th century. Calvin impugned the saint's existence altogether, and Edward Reynolds (1599-1676), bishop of Norwich, like Edward Gibbon a century later, made him one with George of Laodicea, called "the Cappadocian," the Arian bishop of Alexandria (see GEORGE OF LAODICEA).

Modern criticism, while rejecting this identification, is not unwilling to accept the main fact that an officer named Georgios, of high rank in the army, suffered martyrdom probably under Diocletian. In the canon of Pope Gelasius (494) George is mentioned in a list of those "whose names are justly reverenced among men, but whose acts are known only to God," a statement which implies that legends had already grown up around his name. The caution of Gelasius was not long preserved; Gregory of Tours, for example, asserts that the saint's relics actually existed in the French village of Le Maine, where many miracles were wrought by means of them; and Bede, while still explaining that the *Gesta Georgii* are reckoned apocryphal, commits himself to the statement that the martyr was beheaded under Dacian, king of Persia, whose wife Alexandra, however, adhered to the Christian faith. The great fame of George, who is reverenced alike by Eastern and Western Christendom and by Mahommedans, is due to many causes. He was martyred on the eve of the triumph of Christianity, his shrine was reared near the scene of a great Greek legend (Perseus and Andromeda), and his relics when removed from Lydda, where many pilgrims had visited them, to Zorava in the Hauran served to impress his fame not only on the Syrian population, but on their Moslem conquerors, and again on the Crusaders, who in grateful memory of the saint's intervention on their behalf at Antioch built a new cathedral at Lydda to take the place of the church destroyed by the Saracens. This cathedral was in turn destroyed by Saladin.

The connexion of St George with a dragon, familiar since the *Golden Legend* of Jacobus de Voragine, can be traced to the close of the 6th century. At Arsuf or Joppa—neither of them far from Lydda—Perseus had slain the sea-monster that threatened the virgin Andromeda, and George, like many another Christian saint, entered into the inheritance of veneration previously enjoyed by a pagan hero.[1] The exploit thus attaches itself to the very common Aryan myth of the sun-god as the conqueror of the powers of darkness.

The popularity of St George in England has never reached the height attained by St Andrew in Scotland, St David in Wales or St Patrick in Ireland. The council of Oxford in 1222 ordered that his feast should be kept as a national festival; but it was not until the time of Edward III. that he was made patron of the kingdom. The republics of Genoa and Venice were also under his protection.

See P. Heylin, *The History of ... S. George of Cappadocia* (1631); S. Baring-Gould, Curious *Myths of the Middle Ages*; Fr. Görres, "Der Ritter St Georg in der Geschichte, Legende und Kunst" (*Zeitschrift für wissenschaftliche Theologie*, xxx., 1887, Heft i.); E.A.W. Budge, *The Martyrdom and Miracles of St George of Cappadocia*: the Coptic texts edited with an English translation (1888); Bolland, *Acta Sancti*, iii. 101; E.O. Gordon, *Saint George* (1907); M.H. Bulley, *St George for Merrie England* (1908).

1 G.A. Smith (*Hist. Geog. of Holy Land*, p. 164) points out another coincidence. "The Mahommedans who usually identify St George with the prophet Elijah, at Lydda confound his legend with one about Christ himself. Their name for Antichrist is Dajjal, and they have a tradition that Jesus will slay Antichrist by the gate of Lydda. The notion sprang from an ancient bas-relief of George and the Dragon on the Lydda church. But Dajjal may be derived, by a very common confusion between *n* and *l*, from Dagon, whose name two neighbouring villages bear to this day, while one of the gates of Lydda used to be called the Gate of Dagon." It is a curious process by which the monster that symbolized heathenism conquered by Christianity has been evolved out of the first great rival of the God of Israel.

GEORGE I. [George Louis] (1660-1727), king of Great Britain and Ireland, born in 1660, was heir through his father Ernest Augustus to the hereditary lay bishopric of Osnabrück, and to the duchy of Calenberg, which formed one portion of the Hanoverian possessions of the house of Brunswick, whilst he secured the reversion of the other portion, the duchy of Celle or Zell, by his marriage (1682) with the heiress, his cousin Sophia Dorothea. The marriage was not a

happy one. The morals of German courts in the end of the 17th century took their tone from the splendid profligacy of Versailles. It became the fashion for a prince to amuse himself with a mistress or more frequently with many mistresses simultaneously, and he was often content that the mistresses whom he favoured should be neither beautiful nor witty. George Louis followed the usual course. Count Königsmark—a handsome adventurer—seized the opportunity of paying court to the deserted wife. Conjugal infidelity was held at Hanover to be a privilege of the male sex. Count Königsmark was assassinated. Sophia Dorothea was divorced in 1694, and remained in seclusion till her death in 1726. When George IV., her descendant in the fourth generation, attempted in England to call his wife to account for sins of which he was himself notoriously guilty, free-spoken public opinion reprobated the offence in no measured terms. But in the Germany of the 17th century all free-spoken public opinion had been crushed out by the misery of the Thirty Years' War, and it was understood that princes were to arrange their domestic life according to their own pleasure.

The prince's father did much to raise the dignity of his family. By sending help to the emperor when he was struggling against the French and the Turks, he obtained the grant of a ninth electorate in 1692. His marriage with Sophia, the youngest daughter of Elizabeth the daughter of James I. of England, was not one which at first seemed likely to confer any prospect of advancement to his family. But though there were many persons whose birth gave them better claims than she had to the English crown, she found herself, upon the death of the duke of Gloucester, the next Protestant heir after Anne. The Act of Settlement in 1701 secured the inheritance to herself and her descendants. Being old and unambitious she rather permitted herself to be burthened with the honour than thrust herself forward to meet it. Her son George took a deeper interest in the matter. In his youth he had fought with determined courage in the wars of William III. Succeeding to the electorate on his father's death in 1698, he had sent a welcome reinforcement of Hanoverians to fight under Marlborough at Blenheim. With prudent persistence he attached himself closely to the Whigs and to Marlborough, refusing Tory offers of an independent command, and receiving in return for his fidelity a guarantee by the Dutch of his succession to England in the Barrier treaty of 1709. In 1714 when Anne was growing old, and Bolingbroke and the more reckless Tories were coquetting with the son of James II., the Whigs invited George's eldest son, who was duke of Cambridge, to visit England in order to be on the spot in case of need. Neither the elector nor his mother approved of a step which was likely to alienate the queen, and which was specially distasteful to himself, as he was on very bad terms with his son. Yet they did not set themselves against the strong wish of the party to which they looked for support, and it is possible that troubles would have arisen from any attempt to carry out the plan, if the deaths, first of the electress (May 28) and then of the queen (August 1, 1714), had not laid open George's way to the succession without further effort of his own.

In some respects the position of the new king was not unlike that of William III. a quarter of a century before. Both sovereigns were foreigners, with little knowledge of English politics and little interest in English legislation. Both sovereigns arrived at a time when party spirit had been running high, and when the task before the ruler was to still the waves of contention. In spite of the difference between an intellectually great man and an intellectually small one, in spite too of the difference between the king who began by choosing his ministers from both parties and the king who persisted in choosing his ministers from only one, the work of pacification was accomplished by George even more thoroughly than by William.

George I. was fortunate in arriving in England when a great military struggle had come to an end. He had therefore no reason to call upon the nation to make great sacrifices. All that he wanted was to secure for himself and his family a high position which he hardly knew how to occupy, to fill the pockets of his German attendants and his German mistresses, to get away as often as possible from the uncongenial islanders whose language he was unable to speak, and to use the strength of England to obtain petty advantages for his German principality. In order to do this he attached himself entirely to the Whig party, though he refused to place himself at the disposal of its leaders. He gave his confidence, not to Somers and Wharton and Marlborough, but to Stanhope and Townshend, the statesmen of the second rank. At first he seemed to be playing a dangerous game. The Tories, whom he rejected, were numerically superior to their adversaries, and were strong in the support of the country gentlemen and the country clergy. The strength of the Whigs lay in the towns and in the higher aristocracy. Below both parties lay the mass of the nation, which cared nothing for politics except in special seasons of excitement, and which asked only to be let alone. In 1715 a Jacobite insurrection in the north, supported by the appearance of the Pretender, the son of James II., in Scotland, was suppressed, and its suppression not only gave to the government a character of stability, but displayed its adversaries in an unfavourable light as the disturbers of the peace.

Even this advantage, however, would have been thrown away if the Whigs in power had continued to be animated by violent party spirit. What really happened was that the Tory

leaders were excluded from office, but that the principles and prejudices of the Tories were admitted to their full weight in the policy of the government. The natural result followed. The leaders to whom no regard was paid continued in opposition. The rank and file, who would personally have gained nothing by a party victory, were conciliated into quiescence.

This mingling of two policies was conspicuous both in the foreign and the domestic actions of the reign. In the days of Queen Anne the Whig party had advocated the continuance of war with a view to the complete humiliation of the king of France, whom they feared as the protector of the Pretender, and in whose family connexion with the king of Spain they saw a danger for England. The Tory party, on the other hand, had been the authors of the peace of Utrecht, and held that France was sufficiently depressed. A fortunate concurrence of circumstances enabled George's ministers, by an alliance with the regent of France, the duke of Orleans, to pursue at the same time the Whig policy of separating France from Spain and from the cause of the Pretender, and the Tory policy of the maintenance of a good understanding with their neighbour across the Channel. The same eclecticism was discernible in the proceedings of the home government. The Whigs were conciliated by the repeal of the Schism Act and the Occasional Conformity Act, whilst the Tories were conciliated by the maintenance of the Test Act in all its vigour. The satisfaction of the masses was increased by the general well-being of the nation.

Very little of all that was thus accomplished was directly owing to George I. The policy of the reign is the policy of his ministers. Stanhope and Townshend from 1714 to 1717 were mainly occupied with the defence of the Hanoverian settlement. After the dismissal of the latter in 1717, Stanhope in conjunction with Sunderland took up a more decided Whig policy. The Occasional Conformity Act and the Schism Act were repealed in 1719. But the wish of the liberal Whigs to modify if not to repeal the Test Act remained unsatisfied. In the following year the bursting of the South Sea bubble, and the subsequent deaths of Stanhope in 1721 and of Sunderland in 1722, cleared the way for the accession to power of Sir Robert Walpole, to whom and not to the king was due the conciliatory policy which quieted Tory opposition by abstaining from pushing Whig principles to their legitimate consequences.

Nevertheless something of the honour due to Walpole must be reckoned to the king's credit. It is evident that at his accession his decisions were by no means unimportant. The royal authority was still able within certain limits to make its own terms. This support was so necessary to the Whigs that they made no resistance when he threw aside their leaders on his arrival in England. When by his personal intervention he dismissed Townshend and appointed Sunderland, he had no such social and parliamentary combination to fear as that which almost mastered his great-grandson in his struggle for power. If such a combination arose before the end of his reign it was owing more to his omitting to fulfil the duties of his station than from the necessity of the case. As he could talk no English, and his ministers could talk no German, he absented himself from the meetings of the cabinet, and his frequent absences from England and his want of interest in English politics strengthened the cabinet in its tendency to assert an independent position. Walpole at last by his skill in the management of parliament rose as a subject into the almost royal position denoted by the name of prime minister. In connexion with Walpole the force of wealth and station established the Whig aristocracy in a point of vantage from which it was afterwards difficult to dislodge them. Yet, though George had allowed the power which had been exercised by William and Anne to slip through his hands, it was understood to the last that if he chose to exert himself he might cease to be a mere cipher in the conduct of affairs. As late as 1727 Bolingbroke gained over one of the king's mistresses, the duchess of Kendal; and though her support of the fallen Jacobite took no effect, Walpole was not without fear that her reiterated entreaties would lead to his dismissal. The king's death in a carriage on his way to Hanover, in the night between 10th and 11th June in the same year, put an end to these apprehensions.

His only children were his successor George II. and Sophia Dorothea (1687-1757), who married in 1706 Frederick William, crown prince (afterwards king) of Prussia. She was the mother of Frederick the Great.

(S. R. G.)

See the standard English histories. A recent popular work is L. Melville's *The First George in Hanover and England* (1908).

GEORGE II. [George Augustus] (1683-1760), king of Great Britain and Ireland, the only son of George I., was born in 1683. In 1705 he married Wilhelmina Caroline of Anspach. In 1706 he

was created earl of Cambridge. In 1708 he fought bravely at Oudenarde. At his father's accession to the English throne he was thirty-one years of age. He was already on bad terms with his father. The position of an heir-apparent is in no case an easy one to fill with dignity, and the ill-treatment of the prince's mother by his father was not likely to strengthen in him a reverence for paternal authority. It was most unwillingly that, on his first journey to Hanover in 1716, George I. appointed the prince of Wales guardian of the realm during his absence. In 1717 the existing ill-feeling ripened into an open breach. At the baptism of one of his children, the prince selected one godfather whilst the king persisted in selecting another. The young man spoke angrily, was ordered into arrest, and was subsequently commanded to leave St James's and to be excluded from all court ceremonies. The prince took up his residence at Leicester House, and did everything in his power to support the opposition against his father's ministers.

When therefore George I. died in 1727, it was generally supposed that Walpole would be at once dismissed. The first direction of the new king was that Sir Spencer Compton would draw up the speech in which he was to announce to the privy council his accession. Compton, not knowing how to set about his task, applied to Walpole for aid. Queen Caroline took advantage of this evidence of incapacity, advocated Walpole's cause with her husband and procured his continuance in office. This curious scene was indicative of the course likely to be taken by the new sovereign. His own mind was incapable of rising above the merest details of business. He made war in the spirit of a drill-sergeant, and he economized his income with the minute regularity of a clerk. A blunder of a master of the ceremonies in marshalling the attendants on a levee put him out of temper. He took the greatest pleasure in counting his money piece by piece, and he never forgot a date. He was above all things methodical and regular. "He seems," said one who knew him well, "to think his having done a thing to-day an unanswerable reason for his doing it to-morrow."

Most men so utterly immersed in details would be very impracticable to deal with. They would obstinately refuse to listen to a wisdom and prudence which meant nothing in their ears, and which brought home to them a sense of their own inferiority. It was the happy peculiarity of George II. that he was exempt from this failing. He seemed to have an instinctive understanding that such and such persons were either wiser or even stronger than himself, and when he had once discovered that, he gave way with scarcely a struggle. Thus it was that, though in his domestic relations he was as loose a liver as his father had been, he allowed himself to be guided by the wise but unobtrusive counsels of his wife until her death in 1737, and that when once he had recognized Walpole's superiority he allowed himself to be guided by the political sagacity of the great minister. It is difficult to exaggerate the importance of such a temper upon the development of the constitution. The apathy of the nation in all but the most exciting political questions, fostered by the calculated conservatism of Walpole, had thrown power into the hands of the great landowners. They maintained their authority by supporting a minister who was ready to make use of corruption, wherever corruption was likely to be useful, and who could veil over the baseness of the means which he employed by his talents in debate and in finance. To shake off a combination so strong would not have been easy. George II. submitted to it without a struggle.

So strong indeed had the Whig aristocracy grown that it began to lose its cohesion. Walpole was determined to monopolize power, and he dismissed from office all who ventured to oppose him. An opposition formidable in talents was gradually formed. In its composite ranks were to be found Tories and discontented Whigs, discarded official hacks who were hungry for the emoluments of office, and youthful purists who fancied that if Walpole were removed, bribes and pensions would cease to be attractive to a corrupt generation. Behind them was Bolingbroke, excluded from parliament but suggesting every party move. In 1737 the opposition acquired the support of Frederick, prince of Wales. The young man, weak and headstrong, rebelled against the strict discipline exacted by his father. His marriage in 1736 to Augusta of Saxony brought on an open quarrel. In 1737, just as the princess of Wales was about to give birth to her first child, she was hurried away by her husband from Hampton Court to St James's Palace at the imminent risk of her life, simply in order that the prince might show his spite to his father who had provided all necessary attendance at the former place. George ordered his son to quit St James's, and to absent himself from court. Frederick in disgrace gave the support of his name, and he had nothing else to give, to the opposition. Later in the year 1737, on the 20th of November, Queen Caroline died. In 1742 Walpole, weighed down by the unpopularity both of his reluctance to engage in a war with Spain and of his supposed remissness in conducting the operations of that war, was driven from office. His successors formed a composite ministry in which Walpole's old colleagues and Walpole's old opponents were alike to be found.

The years which followed settled conclusively, at least for this reign, the constitutional question of the power of appointing ministers. The war between Spain and England had broken

out in 1739. In 1741 the death of the emperor Charles VI. brought on the war of the Austrian succession. The position of George II. as a Hanoverian prince drew him to the side of Maria Theresa through jealousy of the rising Prussian monarchy. Jealousy of France led England in the same direction, and in 1741 a subsidy of £300,000 was voted to Maria Theresa. The king himself went to Germany and attempted to carry on the war according to his own notions. Those notions led him to regard the safety of Hanover as of far more importance than the wishes of England. Finding that a French army was about to march upon his German states, he concluded with France a treaty of neutrality for a year without consulting a single English minister. In England the news was received with feelings of disgust. The expenditure of English money and troops was to be thrown uselessly away as soon as it appeared that Hanover was in the slightest danger. In 1742 Walpole was no longer in office. Lord Wilmington, the nominal head of the ministry, was a mere cipher. The ablest and most energetic of his colleagues, Lord Carteret (afterwards Granville), attached himself specially to the king, and sought to maintain himself in power by his special favour and by brilliant achievements in diplomacy.

In part at least by Carteret's mediation the peace of Breslau was signed, by which Maria Theresa ceded Silesia to Frederick (July 28, 1742). Thus relieved on her northern frontier, she struck out vigorously towards the west. Bavaria was overrun by her troops. In the beginning of 1743 one French army was driven across the Rhine. On June 27th another French army was defeated by George II. in person at Dettingen. Victory brought elation to Maria Theresa. Her war of defence was turned into a war of vengeance. Bavaria was to be annexed. The French frontier was to be driven back. George II. and Carteret after some hesitation placed themselves on her side. Of the public opinion of the political classes in England they took no thought. Hanoverian troops were indeed to be employed in the war, but they were to be taken into British pay. Collisions between British and Hanoverian officers were frequent. A storm arose against the preference shown to Hanoverian interests. After a brief struggle Carteret, having become Lord Granville by his mother's death, was driven from office in November 1744.

Henry Pelham, who had become prime minister in the preceding year, thus saw himself established in power. By the acceptance of this ministry, the king acknowledged that the function of choosing a ministry and directing a policy had passed from his hands. In 1745 indeed he recalled Granville, but a few days were sufficient to convince him of the futility of his attempt, and the effort to exclude Pitt at a later time proved equally fruitless.

Important as were the events of the remainder of the reign, therefore, they can hardly be grouped round the name of George II. The resistance to the invasion of the Young Pretender in 1745, the peace of Aix-la-Chapelle in 1748, the great war ministry of Pitt at the close of the reign, did not receive their impulse from him. He had indeed done his best to exclude Pitt from office. He disliked him on account of his opposition in former years to the sacrifices demanded by the Hanoverian connexion. When in 1756 Pitt became secretary of state in the Devonshire administration, the king bore the yoke with difficulty. Early in the next year he complained of Pitt's long speeches as being above his comprehension, and on April 5, 1757, he dismissed him, only to take him back shortly after, when Pitt, coalescing with Newcastle, became master of the situation. Before Pitt's dismissal George II. had for once an opportunity of placing himself on the popular side, though, as was the case of his grandson during the American war, it was when the popular side happened to be in the wrong. In the true spirit of a martinet, he wished to see Admiral Byng executed. Pitt urged the wish of the House of Commons to have him pardoned. "Sir," replied the king, "you have taught me to look for the sense of my subjects in another place than in the House of Commons." When George II. died in 1760, he left behind him a settled understanding that the monarchy was one of the least of the forces by which the policy of the country was directed. To this end he had contributed much by his disregard of English opinion in 1743; but it may fairly be added that, but for his readiness to give way to irresistible adversaries, the struggle might have been far more bitter and severe than it was.

Of the connexion between Hanover and England in this reign two memorials remain more pleasant to contemplate than the records of parliamentary and ministerial intrigues. With the support of George II., amidst the derision of the English fashionable world, the Hanoverian Handel produced in England those masterpieces which have given delight to millions, whilst the foundation of the university of Göttingen by the same king opened a door through which English political ideas afterwards penetrated into Germany.

George II. had three sons,—Frederick Louis (1707-1751); George William (1717-1718); and William Augustus, duke of Cumberland (1721-1765); and five daughters, Anne (1709-1759), married to William, prince of Orange, 1734; Amelia Sophia Eleonora (1711-1786); Elizabeth Caroline (1713-1757); Mary (1723-1772), married to Frederick, landgrave of Hesse-Cassel, 1740; Louisa (1724-1751), married to Frederick V., king of Denmark, 1743.

(S. R. G.)

See Lord Hervey, *Memoirs of the Reign of George II.*, ed. by J. W, Croker (3 vols., London, 1884); Horace Walpole, *Mem. of the Reign of George II.*, with notes by Lord Holland (3 vols., 2nd ed., 1847).

GEORGE III. [George William Frederick] (1738-1820), king of Great Britain and Ireland, son of Frederick, prince of Wales, and grandson of George II., whom he succeeded in 1760, was born on the 4th of June 1738. After his father's death in 1751 he had been educated in seclusion from the fashionable world under the care of his mother and of her favourite counsellor the earl of Bute. He had been taught to revere the maxims of Bolingbroke's "Patriot King," and to believe that it was his appointed task in life to break the power of the Whig houses resting upon extensive property and the influence of patronage and corruption. That power had already been gravely shaken. The Whigs from their incompetency were obliged when the Seven Years' War broke out to leave its management in the hands of William Pitt. The nation learned to applaud the great war minister who succeeded where others had failed, and whose immaculate purity put to shame the ruck of barterers of votes for places and pensions.

In some sort the work of the new king was the continuation of the work of Pitt. But his methods were very different. He did not appeal to any widely spread feeling or prejudice; nor did he disdain the use of the arts which had maintained his opponents in power. The patronage of the crown was to be really as well as nominally his own; and he calculated, not without reason, that men would feel more flattered in accepting a place from a king than from a minister. The new Toryism of which he was the founder was no recurrence to the Toryism of the days of Charles II. or even of Anne. The question of the amount of toleration to be accorded to Dissenters had been entirely laid aside. The point at issue was whether the crown should be replaced in the position which George I. might have occupied at the beginning of his reign, selecting the ministers and influencing the deliberations of the cabinet. For this struggle George III. possessed no inconsiderable advantages. With an inflexible tenacity of purpose, he was always ready to give way when resistance was really hopeless. As the first English-born sovereign of his house, speaking from his birth the language of his subjects, he found a way to the hearts of many who never regarded his predecessors as other than foreign intruders. The contrast, too, between the pure domestic life which he led with his wife Charlotte, whom he married in 1761, and the habits of three generations of his house, told in his favour with the vast majority of his subjects. Even his marriage had been a sacrifice to duty. Soon after his accession he had fallen in love with Lady Sarah Lennox, and had been observed to ride morning by morning along the Kensington Road, from which the object of his affections was to be seen from the lawn of Holland House making hay, or engaged in some other ostensible employment. Before the year was over Lady Sarah appeared as one of the queen's bridesmaids, and she was herself married to Sir Charles Bunbury in 1762.

At first everything seemed easy to him. Pitt had come to be regarded by his own colleagues as a minister who would pursue war at any price, and in getting rid of Pitt in 1761 and in carrying on the negotiations which led to the peace of Paris in 1762, the king was able to gather round him many persons who would not be willing to acquiesce in any permanent change in the system of government. With the signature of the peace his real difficulties began. The Whig houses, indeed, were divided amongst themselves by personal rivalries. But they were none of them inclined to let power and the advantages of power slip from their hands without a struggle. For some years a contest of influence was carried on without dignity and without any worthy aim. The king was not strong enough to impose upon parliament a ministry of his own choice. But he gathered round himself a body of dependants known as the king's friends, who were secure of his favour, and who voted one way or the other according to his wishes. Under these circumstances no ministry could possibly be stable; and yet every ministry was strong enough to impose some conditions on the king. Lord Bute, the king's first choice, resigned from a sense of his own incompetency in 1763. George Grenville was in office till 1765; the marquis of Rockingham till 1766; Pitt, becoming earl of Chatham, till illness compelled him to retire from the conduct of affairs in 1767, when he was succeeded by the duke of Grafton. But a struggle of interests could gain no real strength for any government, and the only chance the king had of effecting a permanent change in the balance of power lay in the possibility of his associating himself with some phase of strong national feeling, as Pitt had associated himself with the war feeling caused by the dissatisfaction spread by the weakness and ineptitude of his predecessors.

Such a chance was offered by the question of the right to tax America. The notion that England was justified in throwing on America part of the expenses caused in the late war was

popular in the country, and no one adopted it more pertinaciously then George III. At the bottom the position which he assumed was as contrary to the principles of parliamentary government as the encroachments of Charles I. had been. But it was veiled in the eyes of Englishmen by the prominence given to the power of the British parliament rather than to the power of the British king. In fact the theory of parliamentary government, like most theories after their truth has long been universally acknowledged, had become a superstition. Parliaments were held to be properly vested with authority, not because they adequately represented the national will, but simply because they were parliaments. There were thousands of people in England to whom it never occurred that there was any good reason why a British parliament should be allowed to levy a duty on tea in the London docks and should not be allowed to levy a duty on tea at the wharves of Boston. Undoubtedly George III. derived great strength from his honest participation in this mistake. Contending under parliamentary forms, he did not wound the susceptibilities of members of parliament, and when at last in 1770 he appointed Lord North—a minister of his own selection—prime minister, the object of his ambition was achieved with the concurrence of a large body of politicians who had nothing in common with the servile band of the king’s friends.

As long as the struggle with America was carried on with any hope of success they gained that kind of support which is always forthcoming to a government which shares in the errors and prejudices of its subjects. The expulsion of Wilkes from the House of Commons in 1769, and the refusal of the House to accept him as a member after his re-election, raised a grave constitutional question in which the king was wholly in the wrong; and Wilkes was popular in London and Middlesex. But his case roused no national indignation, and when in 1774 those sharp measures were taken with Boston which led to the commencement of the American rebellion in 1775, the opposition to the course taken by the king made little way either in parliament or in the country. Burke might point out the folly and inexpedience of the proceedings of the government. Chatham might point out that the true spirit of English government was to be representative, and that that spirit was being violated at home and abroad. George III., who thought that the first duty of the Americans was to obey himself, had on his side the mass of unreflecting Englishmen who thought that the first duty of all colonists was to be useful and submissive to the mother-country. The natural dislike of every country engaged in war to see itself defeated was on his side, and when the news of Burgoyne’s surrender at Saratoga arrived in 1777, subscriptions of money to raise new regiments poured freely in.

In March 1778 the French ambassador in London announced that a treaty of friendship and commerce had been concluded between France and the new United States of America. Lord North was anxious to resign power into stronger hands, and begged the king to receive Chatham as his prime minister. The king would not hear of it. He would have nothing to say to “that perfidious man” unless he would humble himself to enter the ministry as North’s subordinate. Chatham naturally refused to do anything of the kind, and his death in the course of the year relieved the king of the danger of being again overruled by too overbearing a minister. England was now at war with France, and in 1779 she was also at war with Spain.

George III. was still able to control the disposition of office. He could not control the course of events. His very ministers gave up the struggle as hopeless long before he would acknowledge the true state of the case. Before the end of 1779, two of the leading members of the cabinet, Lords Gower and Weymouth, resigned rather than bear the responsibility of so ruinous an enterprise as the attempt to overpower America and France together. Lord North retained office, but he acknowledged to the king that his own opinion was precisely the same as that of his late colleagues.

The year 1780 saw an agitation rising in the country for economical reform, an agitation very closely though indirectly connected with the war policy of the king. The public meetings held in the country on this subject have no unimportant place in the development of the constitution. Since the presentation of the Kentish petition in the reign of William III. there had been from time to time upheavings of popular feeling against the doings of the legislature, which kept up the tradition that parliament existed in order to represent the nation. But these upheavings had all been so associated with ignorance and violence as to make it very difficult for men of sense to look with displeasure upon the existing emancipation of the House of Commons from popular control. The Sacheverell riots, the violent attacks upon the Excise Bill, the no less violent advocacy of the Spanish War, the declamations of the supporters of Wilkes at a more recent time, and even in this very year the Gordon riots, were not likely to make thoughtful men anxious to place real power in the hands of the classes from whom such exhibitions of folly proceeded. But the movement for economical reform was of a very different kind. It was carried on soberly in manner, and with a definite practical object. It asked for no more than the king ought to have been willing to concede. It attacked useless expenditure upon sinecures and unnecessary offices in the household, the only use of which was to spread abroad corruption

amongst the upper classes. George III. could not bear to be interfered with at all, or to surrender any element of power which had served him in his long struggle with the Whigs. He held out for more than another year. The news of the capitulation of Yorktown reached London on the 25th of November 1781. On the 20th of March 1782 Lord North resigned.

George III. accepted the consequences of defeat. He called the marquis of Rockingham to office at the head of a ministry composed of pure Whigs and of the disciples of the late earl of Chatham, and he authorized the new ministry to open negotiations for peace. Their hands were greatly strengthened by Rodney's victory over the French fleet, and the failure of the combined French and Spanish attack upon Gibraltar; and before the end of 1782 a provisional treaty was signed with America, preliminaries of peace with France and Spain being signed early in the following year. On the 3rd of September 1783 the definitive treaties with the three countries were simultaneously concluded. "Sir," said the king to John Adams, the first minister of the United States of America accredited to him, "I wish you to believe, and that it may be understood in America, that I have done nothing in the late contest but what I thought myself indispensably bound to do by the duty which I owed to my people. I will be very frank with you. I was the last to consent to the separation: but the separation having been made and having become inevitable, I have always said, as I say now, that I would be the first to meet the friendship of the United States as an independent power."

Long before the signature of the treaties Rockingham died (July 1, 1782). The king chose Lord Shelburne, the head of the Chatham section of the government, to be prime minister. Fox and the followers of Rockingham refused to serve except under the duke of Portland, a minister of their own selection, and resigned office. The old constitutional struggle of the reign was now to be fought out once more. Fox, too weak to obtain a majority alone, coalesced with Lord North, and defeated Shelburne in the House of Commons on the 27th of February 1783. On the 2nd of April the coalition took office, with Portland as nominal prime minister, and Fox and North the secretaries of state as its real heads.

This attempt to impose upon him a ministry which he disliked made the king very angry. But the new cabinet had a large majority in the House of Commons, and the only chance of resisting it lay in an appeal to the country against the House of Commons. Such an appeal was not likely to be responded to unless the ministers discredited themselves with the nation. George III. therefore waited his time. Though a coalition between men bitterly opposed to one another in all political principles and drawn together by nothing but love of office was in itself discreditable, it needed some more positive cause of dissatisfaction to arouse the constituencies, which were by no means so ready to interfere in political disputes at that time as they are now. Such dissatisfaction was given by the India Bill, drawn up by Burke. As soon as it had passed through the Commons the king hastened to procure its rejection in the House of Lords by his personal intervention with the peers. He authorized Lord Temple to declare in his name that he would count any peer who voted for the bill as his enemy. On the 17th of December 1783 the bill was thrown out. The next day ministers were dismissed. William Pitt became prime minister. After some weeks' struggle with a constantly decreasing majority in the Commons, the king dissolved parliament on the 25th of March 1784. The country rallied round the crown and the young minister, and Pitt was firmly established in office.

There can be no reasonable doubt[1] that Pitt not only took advantage of the king's intervention in the Lords, but was cognizant of the intrigue before it was actually carried out. It was upon him, too, that the weight of reconciling the country to an administration formed under such circumstances lay. The general result, so far as George III. was concerned, was that to all outward appearance he had won the great battle of his life. It was he who was to appoint the prime minister, not any clique resting on a parliamentary support. But the circumstances under which the victory was won were such as to place the constitution in a position very different from that in which it would have been if the victory had been gained earlier in the reign. Intrigue there was indeed in 1783 and 1784 as there had been twenty years before. Parliamentary support was conciliated by Pitt by the grant of royal favours as it had been in the days of Bute. The actual blow was struck by a most questionable message to individual peers. But the main result of the whole political situation was that George III. had gone a long way towards disentangling the reality of parliamentary government from its accidents. His ministry finally stood because it had appealed to the constituencies against their representatives. Since then it has properly become a constitutional axiom that no such appeal should be made by the crown itself. But it may reasonably be doubted whether any one but the king was at that time capable of making the appeal. Lord Shelburne, the leader of the ministry expelled by the coalition, was unpopular in the country, and the younger Pitt had not had time to make his great abilities known beyond a limited circle. The real question for the constitutional historian to settle is not whether under ordinary circumstances a king is the proper person to place himself really as well as nominally at the head of the government; but whether under the special circumstances which existed in 1783 it was not better that the king

should call upon the people to support him, than that government should be left in the hands of men who rested their power on close boroughs and the dispensation of patronage, without looking beyond the walls of the House of Commons for support.

That the king gained credit far beyond his own deserts by the glories of Pitt's ministry is beyond a doubt. Nor can there be any reasonable doubt that his own example of domestic propriety did much to strengthen the position of his minister. It is true that that life was insufferably dull. No gleams of literary or artistic taste lightened it up. The dependants of the court became inured to dull routine unchequered by loving sympathy. The sons of the household were driven by the sheer weariness of such an existence into the coarsest profligacy. But all this was not visible from a distance. The tide of moral and religious improvement which had set in in England since the days of Wesley brought popularity to a king who was faithful to his wife, in the same way that the tide of manufacturing industry and scientific progress brought popularity to the minister who in some measure translated into practice the principles of the *Wealth of Nations*.

Nor were there wanting subjects of importance beyond the circle of politics in which George III. showed a lively interest. The voyages of discovery which made known so large a part of the islands and coasts of the Pacific Ocean received from him a warm support. In the early days of the Royal Academy, its finances were strengthened by liberal grants from the privy purse. His favourite pursuit, however, was farming. When Arthur Young was issuing his *Annals of Agriculture*, he was supplied with information by the king, under the assumed name of Mr Ralph Robinson, relating to a farm at Petersham.

The life of the king was suddenly clouded over. Early in his reign, in 1765, he had been out of health, and—though the fact was studiously concealed at the time—symptoms of mental aberration were even then to be perceived. In October 1788 he was again out of health, and in the beginning of the following month his insanity was beyond a doubt. Whilst Pitt and Fox were contending in the House of Commons over the terms on which the regency should be committed to the prince of Wales, the king was a helpless victim to the ignorance of physicians and the brutalities of his servants. At last Dr Willis, who had made himself a name by prescribing gentleness instead of rigour in the treatment of the insane, was called in. Under his more humane management the king rapidly recovered. Before the end of February 1789 he was able to write to Pitt thanking him for his warm support of his interests during his illness. On the 23rd of April he went in person to St Paul's to return thanks for his recovery.

The popular enthusiasm which burst forth around St Paul's was but a foretaste of a popularity far more universal. The French Revolution frightened the great Whig landowners till they made their peace with the king. Those who thought that the true basis of government was aristocratical were now of one mind with those who thought that the true basis of government was monarchical; and these two classes were joined by a far larger multitude which had no political ideas whatever, but which had a moral horror of the guillotine. As Elizabeth had once been the symbol of resistance to Spain, George was now the symbol of resistance to France. He was not, however, more than the symbol. He allowed Pitt to levy taxes and incur debt, to launch armies to defeat, and to prosecute the English imitators of French revolutionary courses. At last, however, after the Union with Ireland was accomplished, he learned that Pitt was planning a scheme to relieve the Catholics from the disabilities under which they laboured. The plan was revealed to him by the chancellor, Lord Loughborough, a selfish and intriguing politician who had served all parties in turn, and who sought to forward his own interests by falling in with the king's prejudices. George III. at once took up the position from which he never swerved. He declared that to grant concessions to the Catholics involved a breach of his coronation oath. No one has ever doubted that the king was absolutely convinced of the serious nature of the objection. Nor can there be any doubt that he had the English people behind him. Both in his peace ministry and in his war ministry Pitt had taken his stand on royal favour and on popular support. Both failed him alike now, and he resigned office at once. The shock to the king's mind was so great that it brought on a fresh attack of insanity. This time, however, the recovery was rapid. On the 14th of March 1801 Pitt's resignation was formally accepted, and the late speaker, Mr Addington, was installed in office as prime minister.

The king was well pleased with the change. He was never capable of appreciating high merit in any one; and he was unable to perceive that the question on which Pitt had resigned was more than an improper question, with which he ought never to have meddled. "Tell him," he said, in directing his physician to inform Pitt of his restoration to health, "I am now quite well, quite recovered from my illness; but what has he not to answer for, who has been the cause of my having been ill at all?" Addington was a minister after his own mind. Thoroughly honest and respectable, with about the same share of abilities as was possessed by the king himself, he was certainly not likely to startle the world by any flights of genius. But for one circumstance Addington's ministry would have lasted long. So strong was the reaction against the Revolution

that the bulk of the nation was almost as suspicious of genius as the king himself. Not only was there no outcry for legislative reforms, but the very idea of reform was unpopular. The country gentlemen were predominant in parliament, and the country gentlemen as a body looked upon Addington with respect and affection. Such a minister was therefore admirably suited to preside over affairs at home in the existing state of opinion. But those who were content with inaction at home would not be content with inaction abroad. In time of peace Addington would have been popular for a season. In time of war even his warmest admirers could not say that he was the man to direct armies in the most terrible struggle which had ever been conducted by an English government.

For the moment this difficulty was not felt. On the 1st of October 1801, preliminaries of peace were signed between England and France, to be converted into the definitive peace of Amiens on the 27th of March 1802. The ruler of France was now Napoleon Bonaparte, and few persons in England believed that he had any real purpose of bringing his aggressive violence to an end. “Do you know what I call this peace?” said the king; “an experimental peace, for it is nothing else. But it was unavoidable.”

The king was right. On the 18th of May 1803 the declaration of war was laid before parliament. The war was accepted by all classes as inevitable, and the French preparations for an invasion of England roused the whole nation to a glow of enthusiasm only equalled by that felt when the Armada threatened its shores. On the 26th of October the king reviewed the London volunteers in Hyde Park. He found himself the centre of a great national movement with which he heartily sympathized, and which heartily sympathized with him.

On the 12th of February 1804 the king’s mind was again affected. When he recovered, he found himself in the midst of a ministerial crisis. Public feeling allowed but one opinion to prevail in the country—that Pitt, not Addington, was the proper man to conduct the administration in time of war. Pitt was anxious to form an administration on a broad basis, including Fox and all prominent leaders of both parties. The king would not hear of the admission of Fox. His dislike of him was personal as well as political, as he knew that Fox had had a great share in drawing the prince of Wales into a life of profligacy. Pitt accepted the king’s terms, and formed an administration in which he was the only man of real ability. Eminent men, such as Lord Grenville, refused to join a ministry from which the king had excluded a great statesman on purely personal grounds.

The whole question was reopened on Pitt’s death on the 23rd of January 1806. This time the king gave way. The ministry of All the Talents, as it was called, included Fox amongst its members. At first the king was observed to appear depressed at the necessity of surrender. But Fox’s charm of manner soon gained upon him. “Mr Fox,” said the king, “I little thought that you and I should ever meet again in this place; but I have no desire to look back upon old grievances, and you may rest assured I never shall remind you of them.” On the 13th of September Fox died, and it was not long before the king and the ministry were openly in collision. The ministry proposed a measure enabling all subjects of the crown to serve in the army and navy in spite of religious disqualifications. The king objected even to so slight a modification of the laws against the Catholics and Dissenters, and the ministers consented to drop the bill. The king asked more than this. He demanded a written and positive engagement that this ministry would never, under any circumstances, propose to him “any measure of concession to the Catholics, or even connected with the question.” The ministers very properly refused to bind themselves for the future. They were consequently turned out of office, and a new ministry was formed with the duke of Portland as first lord of the treasury and Mr Perceval as its real leader. The spirit of the new ministry was distinct hostility to the Catholic claims. On the 27th of April 1807 a dissolution of parliament was announced, and a majority in favour of the king’s ministry was returned in the elections which speedily followed.

The elections of 1807, like the elections of 1784, gave the king the mastery of the situation. In other respects they were the counterpart of one another. In 1784 the country declared, though perhaps without any clear conception of what it was doing, for a wise and progressive policy. In 1807 it declared for an unwise and retrogressive policy, with a very clear understanding of what it meant. It is in his reliance upon the prejudices and ignorance of the country that the constitutional significance of the reign of George III. appears. Every strong government derives its power from its representative character. At a time when the House of Commons was less really representative than at any other, a king was on the throne who represented the country in its good and bad qualities alike, in its hatred of revolutionary violence, its moral sturdiness, its contempt of foreigners, and its defiance of all ideas which were in any way strange. Therefore it was that his success was not permanently injurious to the working of the constitution as the success of Charles I. would have been. If he were followed by a king less English than himself, the strength of representative power would pass into other hands than those which held the sceptre.

The overthrow of the ministry of All the Talents was the last political act of constitutional importance in which George III. took part. The substitution of Perceval for Portland as the nominal head of the ministry in 1809 was not an event of any real significance, and in 1811 the reign practically came to an end. The king's reason finally broke down after the death of the princess Amelia, his favourite child; and the prince of Wales (see GEORGE IV.) became prince regent. The remaining nine years of George III.'s life were passed in insanity and blindness, and he died on the 29th of January 1820.

His wife, Charlotte Sophia (1744-1818), was a daughter of Charles Louis of Mecklenburg-Strelitz (d. 1816), and was married to the king in London on the 8th of September 1761. After a peaceful and happy married life the queen died at Kew on the 17th of November 1818.

George III. had nine sons. After his successor came Frederick, duke of York and Albany (1763-1827); William Henry, duke of Clarence, afterwards King William IV. (1765-1837); Edward Augustus, duke of Kent (1767-1825), father of Queen Victoria; Ernest Augustus, duke of Cumberland, afterwards king of Hanover (1771-1851); Augustus Frederick, duke of Sussex (1773-1843); Adolphus Frederick, duke of Cambridge (1774-1850); Octavius (1779-1783); Alfred (1780-1782). He had also six daughters—Charlotte Augusta (1766-1828), married in 1797 to Frederick, afterwards king of Württemberg; Augusta Sophia (1768-1840); Elizabeth (1770-1840), married Frederick, landgrave of Hesse-Homburg, 1818; Mary (1776-1857), married to William Frederick, duke of Gloucester, 1816; Sophia (1777-1848); Amelia (1783-1810).

(S. R. G.)

The numerous contemporary memoirs and diaries are full of the best material for a picture of George III.'s reign, apart from the standard histories. Thackeray's *Four Georges* must not be trusted so far as historical judgment is concerned; Jesse's *Memoirs of the Life and Reign of George III.* (2nd ed., 1867) is chiefly concerned with personalities. See also Beckles Willson, *George III., as Man, Monarch and Statesman* (1907).

1 See Lord Fitzmaurice's *Life of Shelburne*, iii. 393.

GEORGE IV. [George Augustus Frederick] (1762-1830), king of Great Britain and Ireland, eldest son of George III., was born at St James's Palace, London, on the 12th of August 1762. He was naturally gifted, was well taught in the classics, learnt to speak French, Italian and German fluently, and had considerable taste for music and the arts; and in person he was remarkably handsome. His tutor, Bishop Richard Hurd, said of him when fifteen years old that he would be "either the most polished gentleman or the most accomplished blackguard in Europe—possibly both"; and the latter prediction was only too fully justified. Reaction from the strict and parsimonious style of his parents' domestic life, which was quite out of touch with the gaiety and extravagance of London "society," had its natural effect in plunging the young prince of Wales, flattered and courted as he was, into a whirl of pleasure-seeking. At the outset his disposition was brilliant and generous, but it was essentially unstable, and he started even before he came of age on a career of dissipation which in later years became wholly profligate. He had an early amour with the actress Mary ("Perdita") Robinson, and in the choice of his friends he opposed and annoyed the king, with whom he soon became (and always remained) on the worst of terms, by associating himself with Fox and Sheridan and the Whig party. When in 1783 he came of age, a compromise between the coalition ministry and the king secured him an income of £50,000 from the Civil List, and £60,000 was voted by parliament to pay his debts and start his separate establishment at Carlton House. There, under the auspices of C.J. Fox and Georgiana, duchess of Devonshire, he posed as a patron of Whig politics and a leader in all the licence and luxury of gay society—the "First gentleman in Europe," as his flatterers described him as years went on. And at this early age he fell seriously in love with the famous Mrs Fitzherbert.

His long connexion with this lady may most conveniently be summarized here. It was indeed for some time the one redeeming and restraining factor in his life, though her devotion and self-sacrificing conduct were in marked contrast with his unscrupulousness and selfishness. Mary Anne (or as she always called herself, Maria) Fitzherbert (1756-1837) was the daughter of Walter Smythe, the second son of Sir John Smythe, Bart., of Acton Burnell Park, Shropshire, and came of an old Roman Catholic family. Educated at a French convent, she married first in 1775 Edward Weld, who died within the year, and secondly in 1778 Thomas Fitzherbert, who died in 1781, leaving his widow with a comfortable fortune. A couple of years later she became

a prominent figure in London society, and her beauty and charm at once attracted the young prince, who wooed her with all the ardour of a violent passion. She herself was distracted between her desire to return his love, her refusal to contemplate becoming his mistress, and her knowledge that state reasons made a regular marriage impossible. The Act of Settlement (1689) entailed his forfeiture of the succession if he married a Roman Catholic, apart from the fact that the Royal Marriage Act of 1772 made any marriage illegal without the king's consent, which was out of the question. But after trying for a while to escape his attentions, her scruples were overcome. In Mrs Fitzherbert's eyes the state law was, after all, not everything. To a Roman Catholic, and equally to any member of the Christian church, a formal marriage ceremony would be ecclesiastically and sacramentally binding; and after a period of passionate importunacy on his part they were secretly married by the Rev. R. Burt, a clergyman of the Church of England, on the 15th of December 1785.[1] There is no doubt as to Mrs Fitzherbert's belief, supported by ecclesiastical considerations, in her correct and binding, though admittedly illegal, relationship to the prince as his canonical wife; and though that relationship was not, and for political reasons could not be, publicly admitted, it was in fact treated by their intimates on the footing of a morganatic marriage. The position nevertheless was inevitably a false one; Mrs Fitzherbert had promised not to publish the evidence of the marriage (which, according to a strict interpretation of the Act of Settlement might have barred succession to the crown), and the rumours which soon got about led the prince to allow it to be disavowed by his political friends. He lived in the most extravagant way, became heavily involved in debt, and as the king would not assist him, shut up Carlton House, and went to live with Mrs Fitzherbert at Brighton. In 1787 a proposal was brought before the House of Commons by Alderman Newnham for a grant in relief of his embarrassments. It was on this occasion that Fox publicly declared in the House of Commons, as on the prince's own authority, in answer to allusions to the marriage, that the story was a malicious falsehood. A little later Sheridan, in deference to Mrs Fitzherbert's pressure and to the prince's own compunction, made a speech guardedly modifying Fox's statement; but though in private the denial was understood, it effected its object, the House voting a grant of £221,000 to the prince and the king adding £10,000 to his income; and Mrs Fitzherbert, who at first thought of severing her connexion with the prince, forgave him. Their union—there was no child of the marriage—was brutally broken off in June 1794 by the prince, when further pressure of debts (and the influence of a new Egeria in Lady Jersey) made him contemplate his official marriage with princess Caroline; in 1800, however, it was renewed, after urgent pleading on the prince's part, and after Mrs Fitzherbert had obtained a formal decision from the pope pronouncing her to be his wife, and sanctioning her taking him back; her influence over him continued till shortly before the prince became regent, when his relations with Lady Hertford brought about a final separation. For the best years of his life he had at least had in Mrs Fitzherbert the nearest approach to a real wife, and this was fully recognized by the royal family.[2] But his dissolute nature was entirely selfish, and his various liaisons ended in the dominance of Lady Conyngham, the "Lady Steward" of his household, from 1821 till his death.

Notorious as the prince of Wales had become by 1788, it was in that year that his father's first attack of insanity made his position in the state one of peculiar importance. Fox maintained and Pitt denied that the prince of Wales, as the heir-apparent, had a right to assume the regency independently of any parliamentary vote. Pitt, with the support of both Houses, proposed to confer upon him the regency with certain restrictions. The recovery of the king in February 1789 put an end, however, to the prince's hopes. In 1794 the prince consented to a marriage with a German Protestant princess, because his father would not pay his debts on any other terms, and his cousin, Princess Caroline of Brunswick, was brought over from Germany and married to him in 1795. Her behaviour was light and flippant, and he was brutal and unloving. The ill-assorted pair soon parted, and soon after the birth of their only child, the princess Charlotte, they were formally separated. With great unwillingness the House of Commons voted fresh sums of money to pay the prince's debts.

In 1811 he at last became prince regent in consequence of his father's definite insanity. No one doubted at that time that it was in his power to change the ministry at his pleasure. He had always lived in close connexion with the Whig opposition, and he now empowered Lord Grenville to form a ministry. There soon arose differences of opinion between them on the answer to be returned to the address of the Houses, and the prince regent then informed the prime minister, Mr Perceval, that he should continue the existing ministry in office. The ground alleged by him for this desertion of his friends was the fear lest his father's recovery might be rendered impossible if he should come to hear of the advent of the opposition to power. Lord Wellesley's resignation in February 1812 made the reconstruction of the ministry inevitable. As there was no longer any hope of the king's recovery, the former objection to a Whig administration no longer existed. Instead of taking the course of inviting the Whigs to take office, he asked them to join the existing administration. The Whig leaders, however, refused to join, on the ground that the question of the Catholic disabilities was too important to be

shelved, and that their difference of opinion with Mr Perceval was too glaring to be ignored. The prince regent was excessively angry, and continued Perceval in office till that minister's assassination on the 11th of May, when he was succeeded by Lord Liverpool, after a negotiation in which the proposition of entering the cabinet was again made to the Whigs and rejected by them. In the military glories of the following years the prince regent had no share. When the allied sovereigns visited England in 1814, he played the part of host to perfection. So great was his unpopularity at home that hisses were heard in the streets as he accompanied his guests into the city. The disgust which his profligate and luxurious life caused amongst a people suffering from almost universal distress after the conclusion of the war rapidly increased. In 1817 the windows of the prince regent's carriage were broken as he was on his way to open parliament.

The death of George III. on the 29th of January 1820, gave to his son the title of king without in any way altering the position which he had now held for nine years. Indirectly, however, this change brought out a manifestation of popular feeling such as his father had never been subjected to even in the early days of his reign, when mobs were burning jack-boots and petticoats. The relations between the new king and his wife unavoidably became the subject of public discussion. In 1806 a charge against the princess of having given birth to an illegitimate child had been conclusively disproved, and the old king had consequently refused to withdraw her daughter, the princess Charlotte, from her custody. When in the regency the prince was able to interfere, and prohibited his wife from seeing her daughter more than once a fortnight. On this, in 1813, the princess addressed to her husband a letter setting forth her complaints, and receiving no answer published it in the *Morning Chronicle*. The prince regent then referred the letter, together with all papers relating to the inquiry of 1806, to a body of twenty-three privy councillors for an opinion whether it was fit that the restrictions on the intercourse between the princess Charlotte and her mother should continue in force. All except two answered as the regent wished them to answer. But if the official leaning was towards the husband, the leaning of the general public was towards the wife of a man whose own life had not been such as to justify him in complaining of her whom he had thrust from him without a charge of any kind. Addresses of sympathy were sent up to the princess from the city of London and other public bodies. The discord again broke out in 1814 in consequence of the exclusion of the princess from court during the visit of the allied sovereigns. In August in that year she left England, and after a little time took up her abode in Italy. The accession of George IV. brought matters to a crisis. He ordered that no prayer for his wife as queen should be admitted into the Prayer Book. She at once challenged the accusation which was implied in this omission by returning to England. On the 7th of June she arrived in London. Before she left the continent she had been informed that proceedings would be taken against her for adultery if she landed in England. Two years before, in 1818, commissioners had been sent to Milan to investigate charges against her, and their report, laid before the cabinet in 1819, was made the basis of the prosecution. On the day on which she arrived in London a message was laid before both Houses recommending the criminating evidence to parliament. A secret committee in the House of Lords after considering this evidence brought in a report on which the prime minister founded a Bill of Pains and Penalties to divorce the queen and to deprive her of her royal title. The bill passed the three readings with diminished majorities, and when on the third reading it obtained only a majority of nine, it was abandoned by the Government. The king's unpopularity, great as it had been before, was now greater than ever. Public opinion, without troubling itself to ask whether the queen was guilty or not, was roused to indignation by the spectacle of such a charge being brought by a husband who had thrust away his wife to fight the battle of life alone, without protection or support, and who, whilst surrounding her with spies to detect, perhaps to invent, her acts of infidelity, was himself notorious for his adulterous life. In the following year (1821) she attempted to force her way into Westminster Abbey to take her place at the coronation. On this occasion the popular support failed her; and her death in August relieved the king from further annoyance.

Immediately after the death of the queen, the king set out for Ireland. He remained there but a short time, and his effusive declaration that rank, station, honours were nothing compared with the exalted happiness of living in the hearts of his Irish subjects gained him a momentary popularity which was beyond his attainment in a country where he was better known. His reception in Dublin encouraged him to attempt a visit to Edinburgh in the following year (August 1822). Since Charles II. had come to play the sorry part of a covenanting king in 1650 no sovereign of the country had set foot on Scottish soil. Sir Walter Scott took the leading part in organizing his reception. The enthusiasm with which he was received equalled, if it did not surpass, the enthusiasm with which he had been received in Dublin. But the qualities which enabled him to fix the fleeting sympathies of the moment were not such as would enable him to exercise the influence in the government which had been indubitably possessed by his father. He returned from Edinburgh to face the question of the appointment of a secretary of state which had been raised by the death of Lord Londonderry (Castlereagh). It was upon the

question of the appointment of ministers that the battle between the Whigs and the king had been fought in the reign of George III. George IV. had neither the firmness nor the moral weight to hold the reins which his father had grasped. He disliked Canning for having taken his wife's side very much as his father had disliked Fox for taking his own. But Lord Liverpool insisted on Canning's admission to office, and the king gave way. Tacitly and without a struggle the constitutional victory of the last reign was surrendered. But it was not surrendered to the same foe as that from which it had been won. The coalition ministry in 1784 rested on the great landowners and the proprietors of rotten boroughs. Lord Liverpool's ministry had hitherto not been very enlightened, and it supported itself to a great extent upon a narrow constituency. But it did appeal to public opinion in a way that the coalition did not, and what it wanted itself in popular support would be supplied by its successors. What one king had gained from a clique another gave up to the nation. Once more, on Lord Liverpool's death in 1827, the same question was tried with the same result. The king not only disliked Canning personally, but he was opposed to Canning's policy. Yet after some hesitation he accepted Canning as prime minister; and when, after Canning's death and the short ministry of Lord Goderich, the king in 1828 authorized the duke of Wellington to form a ministry, he was content to lay down the principle that the members of it were not expected to be unanimous on the Catholic question. When in 1829 the Wellington ministry unexpectedly proposed to introduce a Bill to remove the disabilities of the Catholics, he feebly strove against the proposal and quickly withdrew his opposition. The worn-out debauchee had neither the merit of acquiescing in the change nor the courage to resist it.

George IV. died on the 26th of June 1830, and was succeeded by his brother, the duke of Clarence, as William IV. His only child by Queen Caroline, the princess Charlotte Augusta, was married in 1816 to Leopold of Saxe-Coburg, afterwards king of the Belgians, and died in childbirth on the 6th of November 1817.

George IV. was a bad king, and his reign did much to disgust the country with the Georgian type of monarchy; but libertine and profligate as he became, the abuse which has been lavished on his personal character has hardly taken into sufficient consideration the loose morals of contemporary society, the political position of the Whig party, and his own ebullient temperament. Thackeray, in his *Four Georges*, is frequently unfair in this respect. The just condemnation of the moralist and satirist requires some qualification in the light of the picture of the period handed down in the memoirs and diaries of the time, such as Greville's, Croker's, Creevey's, Lord Holland's, Lord Malmesbury's, &c. Among later works see *The First Gentleman of Europe*, by Lewis Melville (1906), a book for the general reader.

(S. R. G.; H. Ch.)

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1 For a discussion of the ecclesiastical validity of the marriage see W.H. Wilkins, *Mrs Fitzherbert and George IV.* (1905), chs. vi. and vii.

2 Mrs Fitzherbert herself, after her final separation from the prince, with an annuity of £6000 a year, lived an honoured and more or less retired life mainly at Brighton, a town which owed its rapid development in fashionable popularity and material wealth to its selection by the prince and herself as a residence from the earliest years of their union; and there she died, seven years after the death of George IV., in 1837. William IV. on his accession offered to create her a duchess, but she declined; she accepted, however, his permission to put her servants in royal livery. William IV. in fact did all he could, short of a public acknowledgment (which the duke of Wellington opposed on state grounds), to recognize her position as his brother's widow. Charles Greville, writing of her after her death, says in his *Diary*, "She was not a clever woman, but of a very noble spirit, disinterested, generous, honest and affectionate." The actual existence of a marriage tie and the documentary evidence of her rights were not definitely established for many years; but in 1905 a sealed packet, deposited at Coutts's bank in 1833, was at length opened by royal permission, and the marriage certificate and other conclusive proofs therein contained were published in Mr W.H. Wilkins's *Mrs Fitzherbert and George IV.* In 1796 the prince had made a remarkable will in Mrs Fitzherbert's favour, which he gave her in 1799, and it is included among these documents (now in the private archives at Windsor). In this he speaks of her emphatically throughout as "my wife." It also contained directions that at his death a locket with her miniature, which he always wore, should be interred with him; and Mrs Fitzherbert was privately assured, on the duke of Wellington's authority, that when the king was buried at Windsor the miniature was on his breast.

GEORGE V. [George Frederick Ernest Albert], king of Great Britain and Ireland and of the British Dominions beyond the Seas, emperor of India (1865-), second son of King Edward VII., was born at Marlborough House, London, on the 3rd of June 1865. When four years old, he and his elder brother, Prince Albert Victor, two years his senior, were placed under the

tutorship of John Neale Dalton, then curate of Sandringham. In 1877 the two princes became naval cadets on the “Britannia” at Spithead, where they passed through the ordinary curriculum, and in 1879 they joined H.M.S. “Bacchante” under the command of Captain Lord Charles Scott, making a voyage to the West Indies, in the course of which they were rated midshipmen. After a month at home in 1880 they returned to the ship to make another prolonged cruise in H.M.S. “Bacchante,” in the course of which they visited South America, South Africa, Australia, the Fiji Islands, Japan, Ceylon, Egypt, Palestine and Greece. A narrative of this voyage, *The Cruise of H.M.S. “Bacchante*,” compiled from the letters, diaries and notebooks of the princes, was published in 1886. At the close of this tour in 1882 the brothers separated. Prince George, who remained in the naval service, was appointed to H.M.S. “Canada,” commanded by Captain Durrant, on the North American and West Indian station, and was promoted sub-lieutenant. On his return home he passed through the Royal Naval College at Greenwich and the gunnery and torpedo schools, being promoted lieutenant in 1885. A year later he was appointed to H.M.S. “Thunderer” of the Mediterranean squadron, and was subsequently transferred to H.M.S. “Dreadnaught” and H.M.S. “Alexandra.” In 1889 he joined the flagship of the Channel squadron, H.M.S. “Northumberland,” and in that year was in command of torpedo boat No. 79 for the naval manœuvres. In 1890 he was put in command of the gunboat H.M.S. “Thrush” for service on the North American and West Indian station. After his promotion as commander in 1891 he commissioned H.M.S. “Melampus,” the command of which he relinquished on the death of his brother, Albert Victor, the duke of Clarence, in January 1892, since his duties as eventual heir to the crown precluded him from devoting himself exclusively to the navy. He was promoted captain in 1893, rear-admiral in 1901, and vice-admiral in 1903. He was created duke of York, earl of Inverness, and Baron Killarney in 1892, and on the 6th of July 1893 he married Princess Victoria Mary (b. 26th May 1867), daughter of Francis, duke of Teck, and Princess Mary Adelaide, duchess of Teck, daughter of Adolphus Frederick, duke of Cambridge. Their eldest son, Prince Edward Albert, was born at White Lodge, Richmond, on the 23rd of June 1894; Prince Albert Frederick George was born at Sandringham on the 14th of December 1895; Princess Victoria Alexandra on the 25th of April 1897; Prince Henry William Frederick Albert on the 31st of March 1900; Prince George Edward Alexander Edmund on the 20th of December 1902; and Prince John Charles Francis on the 12th of July 1905. The duke and duchess of York visited Ireland in 1899, and it had been arranged before the death of Queen Victoria that they should make a tour in the colonies. On the accession of King Edward VII. (1901) this plan was confirmed. They sailed in the “Ophir” on the 16th of March 1901, travelling by the ordinary route, and landed at Melbourne in May, when they opened the first parliament of the Commonwealth. They then proceeded to New Zealand, returning by way of South Africa and Canada. An official account of the tour was published by Sir Donald Mackenzie Wallace as *The Web of Empire* (1902). In November 1901 the duke was created prince of Wales. On the death of Edward VII. (May 6, 1910) he succeeded to the Crown as George V., his consort taking the style of Queen Mary.

GEORGE V., king of Hanover (1819-1878), was the only son of Ernest Augustus, king of Hanover and duke of Cumberland, and consequently a grandson of the English king George III. Born in Berlin on the 27th of May 1819, his youth was passed in England and in Berlin until 1837, when his father became king of Hanover and he took up his residence in that country. He lost the sight of one eye during a childish illness, and the other by an accident in 1833. Being thus totally blind there were doubts whether he was qualified to succeed to the government of Hanover; but his father decided that he should do so, as the law of the dissolved empire only excluded princes who were born blind. This decision was a fatal one to the dynasty. Both from his father and from his maternal uncle, Charles Frederick, prince of Mecklenburg-Strelitz (1785-1837), one of the most influential men at the Prussian court, George had learned to take a very high and autocratic view of royal authority. His blindness prevented him from acquiring the shrewdness and knowledge of the world which had assisted his father, and he easily fell into the hands of unwise, and perhaps dishonest and disloyal, advisers. A man of deep religious feeling, he formed a fantastic conception of the place assigned to the house of Guelph in the divine economy, and had ideas of founding a great Guelph state in Europe. It is, therefore, not surprising that from the time of his accession in November 1851 he was constantly engaged in disputes with his *Landtag* or parliament, and was consequently in a weak and perilous position when the crisis in the affairs of Germany came in 1866. Having supported Austria in the diet of the German confederation in June 1866, he refused, contrary to the wishes of his parliament, to assent to the Prussian demand that Hanover should observe an unarmed neutrality during the war. As a result his country and his capital were at once occupied by the Prussians, to whom

his army surrendered on the 29th of June 1866, and in the following September Hanover was formally annexed by Prussia. From his retreat at Hietzing near Vienna, George appealed in vain to the powers of Europe; and supported by a large number of his subjects, an agitation was carried on which for a time caused some embarrassment to Prussia. All these efforts, however, to bring about a restoration were unavailing, and the king passed the remainder of his life at Gmünden in Austria, or in France, refusing to the last to be reconciled with the Prussian government. Whilst visiting Paris for medical advice he died in that city on the 12th of June 1878, and was buried in St George's chapel, Windsor. In February 1843 he had married Marie, daughter of Joseph, duke of Saxe-Altenburg, by whom he left a son and two daughters. His son, Ernest Augustus, duke of Cumberland (b. 1845), continued to maintain the claim of his house to the kingdom of Hanover.

By the capitulation of 1866 the king was allowed to retain his personal property, which included money and securities equal to nearly £1,500,000, which had been sent to England before the Prussian invasion of Hanover. The crown jewels had also been secretly conveyed to England. His valuable plate, which had been hidden at Herrenhausen, was restored to him in 1867; his palace at Herrenhausen, near Hanover, was reserved as his property; and in 1867 the Prussian government agreed to compensate him for the loss of his landed estates, but owing to his continued hostility the payment of the interest on this sum was suspended in the following year (see HANOVER).

See O. Klopp, *König Georg V.* (Hanover, 1878); O. Theodor, *Erinnerungen an Georg V.* (Bremerhaven, 1878); and O. Meding, *Memoiren zur Zeitgeschichte* (Leipzig, 1881-1884).

GEORGE I., king of the Hellenes (1845-), second son of King Christian IX. of Denmark, was born at Copenhagen on the 24th of December 1845. After the expulsion of King Otho in 1862, the Greek nation, by a plebiscite, elected the British prince, Alfred, duke of Edinburgh (subsequently duke of Coburg), to the vacant throne, and on his refusal the national assembly requested Great Britain to nominate a candidate. The choice of the British government fell on Prince Christian William Ferdinand Adolphus George of Schleswig-Holstein-Sonderburg-Glücksburg, whose election as king of the Hellenes, with the title George I., was recognized by the powers (6th of June 1863). The sister of the new sovereign, Princess Alexandra, had a few months before (10th March) married the prince of Wales, afterwards King Edward VII., and his father succeeded to the crown of Denmark in the following November. Another sister, Princess Dagmar, subsequently married the grand duke Alexander Alexandrovitch, afterwards Emperor Alexander III. of Russia. On his accession, King George signed an act resigning his right of succession to the Danish throne in favour of his younger brother Prince Waldemar. He was received with much enthusiasm by the Greeks. Adopting the motto, "My strength is the love of my people," he ruled in strict accordance with constitutional principles, though not hesitating to make the fullest use of the royal prerogative when the intervention of the crown seemed to be required by circumstances. For the events of his reign see GREECE: *History*.

King George married, on the 27th of October 1867, the grand duchess Olga Constantinovna of Russia, who became distinguished in Greece for her activity on behalf of charitable objects. Their children were Prince Constantine, duke of Sparta (b. 1868), who married in 1889 Princess Sophia of Prussia, daughter of the emperor Frederick, and granddaughter of Queen Victoria; Prince George (b. 1869), from November 1898 to October 1906 high commissioner of the powers in Crete; Prince Nicholas (b. 1872), who married in 1902 the grand duchess Helen-Vladimirovna of Russia; Prince Andrew (b. 1882), who married in 1903 Princess Alice of Battenberg; Prince Christopher (b. 1888); and a daughter, Princess Marie (b. 1876), who married in 1900 the grand duke George Michailovich of Russia.

GEORGE, king of Saxony (1832-1904), the youngest son of King John of Saxony (d. 1873) and Queen Amelia, was born at Dresden on the 8th of August 1832. From an early age he received a careful scientific and military training, and in 1846 entered the active army as a lieutenant of artillery. In 1849-1850 he was a student at the university of Bonn, but soon returned to military life, for which he had a predilection. In the Austro-Prussian War of 1866 he

commanded a Saxon cavalry brigade, and in the early part of the war of 1870-71 a division, but later succeeded to the supreme command of the XII. (Saxon) army corps in the room of his brother, the crown prince Albert (afterwards king) of Saxony. His name is inseparably associated with this campaign, during which he showed undoubted military ability and an intrepidity which communicated itself to all ranks under his command, notably at the battles of St Privat and Beaumont, in which he greatly distinguished himself. On his brother succeeding to the throne he became commander-in-chief of the Saxon army, and was in 1888 made a Prussian field marshal by the emperor William I. He married in 1859 the infanta Maria, sister of King Louis of Portugal, and King Albert's marriage being childless, succeeded on his death in 1902 to the throne of Saxony. He died on the 15th of October 1904, at Pillnitz.

GEORGE OF LAODICEA in Syria, often called "the Cappadocian," from 356 to 361 Arian archbishop of Alexandria, was born about the beginning of the 4th century. According to Ammianus (xxii. 11), he was a native of Epiphania, in Cilicia. Gregory Nazianzen tells us that his father was a fuller, and that he himself soon became notorious as a parasite of so mean a type that he would "sell himself for a cake." After many wanderings, in the course of which he seems to have amassed a considerable fortune, first as an army-contractor and then as a receiver of taxes, he ultimately reached Alexandria. It is not known how or when he obtained ecclesiastical orders; but, after Athanasius had been banished in 356, George was promoted by the influence of the then prevalent Arian faction to the vacant see. His theological attitude was that known as semi-Arian or Homoiousian, and his associates were Eustathius of Sebaste and Basil of Ancyra. At George's instigation the second Sirmian formula (promulgated by the third council of Sirmium 357), which was conciliatory towards strict Arianism, was opposed at the council of Ancyra in 358 (Harnack, *Hist. of Dogma*, iv. 76). His persecutions and oppressions of the orthodox ultimately raised a rebellion which compelled him to flee for his life; but his authority was restored, although with difficulty, by a military demonstration. Untaught by experience, he resumed his course of selfish tyranny over Christians and heathen alike, and raised the irritation of the populace to such a pitch that when, on the accession of Julian, his downfall was proclaimed and he was committed to prison, they dragged him thence and killed him, finally casting his body into the sea (24th of December 361). With much that was sordid and brutal in his character George combined a highly cultivated literary taste, and in the course of his chequered career he had found the means of collecting a splendid library, which Julian ordered to be conveyed to Antioch for his own use. An anonymous work against the Manicheans discovered by Lagarde in 1859 in a MS. of Titus of Bostra has been attributed to him.

The original sources for the facts of the life of George of Laodicea are Ammianus, Gregory Nazianzen, Epiphanius and Athanasius. His character has been drawn with graphic fidelity by Gibbon in the 23rd chapter of the *Decline and Fall*; but the theory, accepted by Gibbon, which identifies him with the patron saint of England is now rejected (see GEORGE, SAINT). See C.S. Hulst, *St George of Cappadocia in Legend and History* (1910).

GEORGE OF TREBIZOND (1395-1484), Greek philosopher and scholar, one of the pioneers of the revival of letters in the Western world, was born in the island of Crete, and derived his surname Trapezuntios from the fact that his ancestors were from Trebizond. At what period he came to Italy is not certain; according to some accounts he was summoned to Venice about 1430 to act as amanuensis to Francesco Barbaro, who appears to have already made his acquaintance; according to others he did not visit Italy till the time of the council of Florence (1438-1439). He learned Latin from Vittorino da Feltre, and made such rapid progress that in three years he was able to teach Latin literature and rhetoric. His reputation as a teacher and a translator of Aristotle was very great, and he was selected as secretary by Pope Nicholas V., an ardent Aristotelian. The needless bitterness of his attacks upon Plato (in the *Comparatio Aristotelis et Platonis*), which drew forth a powerful response from Bessarion (*q.v.*), and the manifestly hurried and inaccurate character of his translations of Plato, Aristotle and other classical authors, combined to ruin his fame as a scholar, and to endanger his position as a teacher of philosophy. The indignation against him on account of his first-named work was so great that he would probably have been compelled to leave Italy had not Alphonso V. given him

protection at the court of Naples. He subsequently returned to Rome, where he died in great poverty on the 12th of August 1484. He had long outlived his reputation, and towards the end of his life his intellect failed him. From all accounts he was a man of very disagreeable character, conceited and quarrelsome.

See G. Voigt, *Die Wiederbelebung des klassischen Altertums* (1893), and article by C.F. Bähr in Ersch and Gruber's *Allgemeine Encyklopädie*. For a complete list of his numerous works, consisting of translations from Greek into Latin (Plato, Aristotle and the Fathers) and original essays in Greek (chiefly theological) and Latin (grammatical and rhetorical), see Fabricius, *Bibliotheca Graeca* (ed. Harles), xii.

GEORGE THE MONK [Georgios Monachos], called Hamartolos (Greek for "sinner"), Byzantine chronicler, lived during the reign of Michael III. (842-867). He wrote a *Chronicle* of events, in four books, from the creation of the world to the death of the emperor Theophilus (842), whose widow Theodora restored the worship of images in the same year. It is the only original contemporary authority for the years 813-842, and therefore so far indispensable; the early parts of the work are merely a compilation. In the introduction the author disclaims all pretensions to literary style, and declares that his only object was to relate such things as were "useful and necessary" with a strict adherence to truth. Far too much attention, however, is devoted to religious matters; the iconoclasts are fiercely attacked, and the whole is interlarded with theological discussions and quotations from the fathers. The work was very popular, and translations of it served as models for Slavonic writers. The MSS. give a continuation down to 948, the author of which is indicated simply as "the logothete," by whom probably Symeon Metaphrastes (second half of the 10th century) is meant. In this religious questions are relegated to the background, more attention is devoted to political history, and the language is more popular. Still further continuations of little value go down to 1143. The large circulation of the work and its subsequent reissues, with alterations and interpolations, make it very difficult to arrive at the original text.

Editions: E. de Muralt (St Petersburg, 1859); J.P. Migne, *Patrologia Graeca*, cx.; C. de Boor (in Teubner series, 1904-). See F. Hirsch, *Byzantinische Studien* (1876); C. de Boor in *Historische Untersuchungen* (in honour of Arnold Schäfer, Bonn, 1882); C. Krumbacher, *Geschichte der byzantinischen Litteratur* (1897).

GEORGE THE SYNCELLUS [Georgios Synkellos], of Constantinople, Byzantine chronicler and ecclesiastic, lived at the end of the 8th and the beginning of the 9th century A.D. He was the *syncellus* (cell-mate, the confidential companion assigned to the patriarchs, sometimes little more than a spy; see Syncellus) or private secretary of Tara(u)sius, patriarch of Constantinople (784-806), after whose death he retired to a convent, and wrote his *Chronicle* of events from Adam to Diocletian (285). At his earnest request, the work, which he doubtless intended to bring down to his own times, was continued after his death by his friend Theophanes Confessor. The *Chronicle*, which, as its title implies, is rather a chronological table (with notes) than a history, is written with special reference to pre-Christian times and the introduction of Christianity, and exhibits the author as a staunch upholder of orthodoxy. But in spite of its religious bias and dry and uninteresting character, the fragments of ancient writers and apocryphal books preserved in it render it specially valuable. For instance, considerable portions of the original text of the *Chronicle* of Eusebius have been restored by the aid of Syncellus. His chief authorities were Annianus of Alexandria (5th century) and Panodorus, an Egyptian monk, who wrote about the year 400 and drew largely from Eusebius, Dexippus and Julius Africanus.

Editio princeps, by J. Goar (1652); in Bonn *Corpus scriptorum hist. Byz.*, by W. Dindorf (1829). See also H. Gelzer, *Sextus Julius Africanus*, ii. 1 (1885); C. Krumbacher, *Geschichte der byzantinischen Litteratur* (1897).

GEORGE, HENRY (1839-1897), American author and political economist, was born in Philadelphia, Penn., on the 2nd of September 1839. He settled in California in 1858; removed to New York, 1880; was first a printer, then an editor, but finally devoted all his life to economic and social questions. In 1871 he published *Our Land Policy*, which, as further developed in 1879 under the title of *Progress and Poverty*, speedily attracted the widest attention both in America and in Europe. In 1886 he published *Protection or Free Trade*. Henry George had no political ambition, but in 1886 he received an independent nomination as mayor of New York City, and became so popular that it required a coalition of the two strongest political parties to prevent his election. He received 68,000 votes, against 90,000 for the coalition candidate. His death on the 29th of October 1897 was followed by one of the greatest demonstrations of popular feeling and general respect that ever attended the funeral of any strictly private citizen in American history. The fundamental doctrine of Henry George, the equal right of all men to the use of the earth, did not originate with him; but his clear statement of a method by which it could be enforced, without increasing state machinery, and indeed with a great simplification of government, gave it a new form. This method he named the *Single Tax*. His doctrine may be condensed as follows: The land of every country belongs of right to all the people of that country. This right cannot be alienated by one generation, so as to affect the title of the next, any more than men can sell their yet unborn children for slaves. Private ownership of land has no more foundation in morality or reason than private ownership of air or sunlight. But the private occupancy and use of land are right and indispensable. Any attempt to divide land into equal shares is impossible and undesirable. Land should be, and practically is now, divided for private use in parcels among those who will pay the highest price for the use of each parcel. This price is now paid to some persons annually, and it is called *rent*. By applying the rent of land, exclusive of all improvements, to the equal benefit of the whole community, absolute justice would be done to all. As rent is always more than sufficient to defray all necessary expenses of government, those expenses should be met by a tax upon rent alone, to be brought about by the gradual abolition of all other taxes. Landlords should be left in undisturbed possession and nominal ownership of the land, with a sufficient margin over the tax to induce them to collect their rents and pay the tax. They would thus be transformed into mere land agents. Obviously this would involve absolute free trade, since all taxes on imports, manufactures, successions, documents, personal property, buildings or improvements would disappear. Nothing made by man would be taxed at all. The right of private property in all things made by man would thus be absolute, for the owner of such things could not be divested of his property, without full compensation, even under the pretence of taxation. The idea of concentrating all taxes upon ground-rent has found followers in Great Britain, North America, Australia and New Zealand. In practical politics this doctrine is confined to the “Single Tax, Limited,” which proposes to defray only the needful public expenses from ground-rent, leaving the surplus, whatever it may be, in the undisturbed possession of landowners.

The principal books by Henry George are: *Progress and Poverty* (1879), *The Irish Land Question* (1881), *Social Problems* (1884), *Protection or Free Trade* (1886), *The Condition of Labor* (1891), *A Perplexed Philosopher* (1892), *Political Economy* (1898). His son, Henry George (b. 1862), has written a *Life* (1900). For the Single Tax theory see Shearman’s *Natural Taxation* (1899).

(T. G. S.)

GEORGE PISIDA [Georgios Pisides], Byzantine poet, born in Pisidia, flourished during the 7th century A.D. Nothing is known of him except that he was a deacon and chartophylax (keeper of the records) of the church of St Sophia. His earliest work, in three cantos (ἀκροάσεις), on the campaign of the emperor Heraclius against the Persians, seems to be the work of an eyewitness. This was followed by the *Avarica*, an account of a futile attack on Constantinople by the Avars (626), said to have been repulsed by the aid of the Virgin Mary; and by the *Heraclias*, a general survey of the exploits of Heraclius both at home and abroad down to the final overthrow of Chosroes in 627. George Pisida was also the author of a didactic poem, *Hexaëmeron* or *Cosmourgia*, upon the creation of the world; a treatise on the vanity of life, after the manner of *Ecclesiastes*; a controversial composition against Severus, bishop of Antioch; two short poems upon the resurrection of Christ and on the recovery of the sacred crucifix stolen by the Persians. The metre chiefly used is the iambic. As a versifier Pisida is correct and even elegant; as a chronicler of contemporary events he is exceedingly useful; and later Byzantine writers enthusiastically compared him with, and even preferred him to Euripides. Recent criticism, however, characterizes his compositions as artificial and almost

uniformly dull.

Complete works in J.P. Migne, *Patrologia Graeca*, xcii.; see also *De Georgii Pisidae apud Theophanem aliosque historicos reliquiis*. (1900), by S.L. Sternbach, who has edited several new poems for the first time from a Paris MS. in *Wiener Studien*, xiii., xiv. (1891-1892); C. Krumbacher, *Geschichte der byzantinischen Litteratur* (1897); C.F. Bähr in Ersch and Gruber's *Allgemeine Encyklopädie*.

GEORGE, LAKE, a lake in the E. part of New York, U.S.A., among the S.E. foothills of the Adirondack Mountains. It extends from N.N.E. to S.S.W. about 34 m., and varies in width from 2 to 4 m. It has a maximum depth of about 400 ft., and is 323 ft. above the sea and 227 ft. above Lake Champlain, into which it has an outlet to the northward through a narrow channel and over falls and rapids. The lake is fed chiefly by mountain brooks and submerged springs; its bed is for the most part covered with a clean sand; its clear water is coloured with beautiful tints of blue and green; and its surface is studded with about 220 islands and islets, all except nineteen of which belong to the state and constitute a part of its forest reserve. Near the head of the lake is Prospect Mountain, rising 1736 ft. above the sea, while several miles farther down the shores is Black Mountain, 2661 ft. in height. Lake George has become a favourite summer resort. Lake steamers ply between the village of Lake George (formerly Caldwell) at the southern end of the lake and Baldwin, whence there is rail connexion with Lake Champlain steamers.

Lake George was formed during the Glacial period by glacial drift which clogged a pre-existing valley. According to Prof. J.F. Kemp the valley occupied by Lake George was a low pass before the Glacial period; a dam of glacial drift at the southern end and of lacustrine clays at the northern end formed the lake which has submerged the pass, leaving higher parts as islands. Before the advent of the white man the lake was a part of the war-path over which the Iroquois Indians frequently made their way northward to attack the Algonquins and the Hurons, and during the struggle between the English and the French for supremacy in America, waterways being still the chief means of communication, it was of great strategic importance (see Champlain, *Lake*). Father Isaac Jogues, René Goupil and Guillaume Couture seem to have been the first white men to see the lake (on the 9th of August 1642) as they were being taken by their Iroquois captors from the St Lawrence to the towns of the Mohawks, and in 1646 Father Jogues, having undertaken a half-religious, half-political mission to the Mohawks, was again at the lake, to which, in allusion to his having reached it on the eve of Corpus Christi, he gave the name Lac Saint Sacrement. This name it bore until the summer of 1755, when General William Johnson renamed it Lake George in honour of King George II.

General Johnson was at this time in command of a force of colonists and Indians sent against the French at Crown Point on Lake Champlain. The expedition, however, had proceeded no farther than to the head of Lake George when Johnson was informed that a force of French and Indians under Baron Ludwig August Dieskau was pushing on from Crown Point to Fort Lyman (later Fort Edward), 14 m. to the S. of their encampment. Accordingly, on the morning of the 8th of September a detachment of 1000 colonials under Colonel Ephraim Williams (1715-1755) and 200 Indians under Hendrick, a Mohawk chief, was sent to aid Fort Lyman, but when about 3 m. S. of the lake this detachment fell into an ambuscade prepared for it by Dieskau and both Williams and Hendrick were killed. The survivors were pursued to their camp, and then followed on the same day the main battle of Lake George, in which 1000 colonials fighting at first behind a hastily prepared barricade defeated about 1400 French and Indians. Both commanders were wounded; Dieskau was captured; the French lost about 300; and the colonials nearly the same (including those who fell earlier in the day). Johnson now built on the lake shore, near the battlefield, a fort of gravel and logs and called it Fort William Henry (the site was occupied by the Fort William Henry Hotel till it was burned in 1909). In the meantime the French entrenched themselves at Ticonderoga at the foot of the lake. In March 1757 Fort William Henry successfully withstood an attack of 1600 men sent out by the marquis de Vaudreuil, governor of Canada, but on the 9th of August of the same year its garrison, after being reduced to desperate straits, surrendered to the marquis de Montcalm. By the terms of surrender the garrison was to be allowed to march out with the honours of war and was to be escorted to Fort Edward, but the guard provided by Montcalm was inadequate to protect them from his Indian allies and on the day following the surrender many were massacred or taken prisoners. The fort was razed to the ground. In 1758 General James Abercrombie proceeded by way of Lake George against Fort Ticonderoga, and in 1759 Baron Jeffrey Amherst, while on his way to co-operate with General James Wolfe against Quebec, built near the site of Fort William

Henry one bastion of a fort since known as Fort George, the ruins of which still remain.

A monument commemorative of the battle of Lake George was unveiled on the 8th of September 1903, on the site of the battle, and within the state reservation of 35 acres known as Fort George Battle Park. Horicon is a name that was given to the lake by James Fenimore Cooper. The Indian name of the lake was Andia-ta-roc-te.

See Francis Parkman, *Montcalm and Wolfe* (Boston, 1884); and E.E. Seelye, *Lake George in History* (Lake George, 1897).

GEORGE JUNIOR REPUBLIC, an American industrial institution, situated near the small village of Freeville, in Tompkins county, New York, U.S.A., 9 m. E.N.E. of Ithaca, at the junction of the Sayre-Auburn and the Elmira-Cortland branches of the Lehigh Valley railway. The George Junior Republic forms a miniature state whose economic, civic and social conditions, as nearly as possible, reproduce those of the United States, and whose citizenship is vested in young people, especially those who are neglected or wayward, who are thus taught self-reliance, self-control and morality. The founder, William Reuben George (b. 1866), was a native of West Dryden, a village near Freeville, who as a business man in New York City became interested in the Fresh Air Fund charity supervised by the New York *Tribune*, took charge of summer outings for city children (1890-1894), and, becoming convinced that such charities tended to promote pauperism and crime among the older of their protégés, devised first (1894) the plan of requiring payment by the children in labour for all they received during these summer jaunts, then (1895) self-government for a summer colony near Freeville, and finally a permanent colony, in which the children stay for several years. The Republic was founded on the 10th of July 1895; the only check on the powers of executive, representative and judicial branches of the government lies in the veto of the superintendent. “Nothing without labour” is the motto of the community, so strictly carried out that a girl or boy in the Republic who has not money[1] to pay for a night’s lodging must sleep in jail and work the next day for the use of the cell. The legislative body, originally a House of Representatives and a Senate, in 1899 became more like the New England town meeting. The respect for the law that follows its enactment by the citizens themselves is remarkable in a class so largely of criminal tendencies; and it is particularly noticeable that positions on the police force are eagerly coveted. Fifteen is the age of majority; suffrage is universal, children under fifteen must be in charge of a citizen guardian. The average age of citizens was seventeen in 1908. The proportion of girls to boys was originally small, but gradually increased; in 1908 there were about 70 girls and 90 boys. The tendency is to admit only those aged at least sixteen and physically well equipped. In the Republic’s earlier years the citizens lived in boarding-houses of different grades, but later in family groups in cottages (there were in 1910 twelve cottages) under the care of “house-mothers.” The labour of the place is divided into sewing, laundry work, cooking and domestic service for the girls, and furniture making, carpentry, farm work, baking bread and wafers (the business of an Auburn biscuit factory was bought in 1903), plumbing and printing for the boys. Masonry and shoe and harness making were tried for a few years. There is an efficient preparatory and high school, from which students enter directly leading colleges. The religious influence is strong, wholesome and unsectarian; students in Auburn Theological Seminary have assisted in the religious work; Roman Catholic and Hebrew services are also held; and attendance at church services is compulsory only on convicts and prisoners.

There are “Woman’s Aid” societies in New York City, Ithaca, Syracuse, Buffalo, Boston and elsewhere, to promote the work of the Republic. A “republic” for younger boys, begun at Freeville, was established in Litchfield, Connecticut; and a National Junior Republic near Annapolis Junction, Maryland, and a Carter Junior Republic at Readington, near Easton, Pennsylvania, are modelled on the George Junior Republic. In 1908-1910 new “states” were established at Chino, California, Grove City, Pennsylvania, and Flemington Junction, New Jersey. In February 1908 the National Association of Junior Republics was formed with Mr George (its founder) as its director, its aims being to establish at least one “republic” in each state of the Union, and in other countries similar institutions for youth and miniature governments modelled on that of the country in which each “state” is established, and to establish colonies for younger children, to be sent at the age of fifteen to the Junior Republic. At the time of its formation the National Association included the “states” at Freeville, N.Y., Litchfield, Conn., and Annapolis Junction, Md.; others joined the federation later.

See William R. George, *The Junior Republic: its History and Ideals* (New York, 1910); *The*

Junior Republic Citizen (Freeville, 1895 sqq.), written and printed by "citizens"; *Nothing Without Labor, George Junior Republic* (7th ed., Freeville, 1909), a manual; J.R. Commons, "The Junior Republic," in *The American Journal of Sociology* (1898); D.F. Lincoln, "The George Junior Republic," in *The Coming Age* (1900); and Lyman Abbott, "A Republic within a Republic," in the *Outlook* for February 15, 1908.

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1 The "government" issued its own currency in tin and later in aluminium, and "American" money could not be passed within the 48 acres of the Republic until 1906, when depreciation forced the Republic's coinage out of use and "American" coin was made legal tender.

GEORGETOWN, the capital of British Guiana (see GUIANA), and the seat of the colonial government, situated on the left bank of the Demerara river at its mouth, in 6° 29′ 24″ N. and 58° 11′ 30″ W. It was known during the Dutch occupation as Stabroek, and was established as the seat of government of the combined colonies of Essequibo and Demerara (now with Berbice forming the three counties of British Guiana) in 1784, its name being changed to Georgetown in 1812. It is one of the finest towns in this part of the world, the streets being wide and straight, intersecting each other at right angles, several having double roadways with lily-covered canals in the centre, the grass banks on either side carrying rows of handsome shade trees. In Main Street, the finest street in Georgetown, the canal has been filled in to form a broad walk, an obvious precedent for the treatment of the other canals, which (however beautiful) are useless and merely act as breeding grounds for mosquitoes. The principal residences, standing in their own gardens surrounded by foliage and flowers, are scattered over the town, as are also the slums, almost the worst of which abut on the best residential quarters. Water Street, the business centre, runs parallel to the river for about 2½ m. and contains the stores of the wholesale and retail merchants, their wharves running out into the river to allow steamers to come alongside. Most of the houses and public buildings are constructed of wood, the former generally raised on brick pillars some 4 ft. to 10 ft. from the ground, the bright colouring of the wooden walls, jalousies and roofs adding to the beauty of the best streets. The large structure known as the Public Buildings in the centre of the city, containing the offices of the executive government and the hall of the court of policy, was erected between 1829 and 1834. It is a handsome, E-shaped, brick-plastered building of considerable size, with deep porticos and marble-paved galleries carried on cast-iron columns. The law courts, built in the 'eighties, have a ground floor of concrete and iron, the upper storey being of hardwood. Among other public buildings are the town hall, the Anglican and Roman Catholic cathedrals, several handsome churches, the local banks and insurance offices, and the almshouse. The public hospital consists of several large blocks. The Royal Agricultural and 750
Commercial Society has a large reading-room and lending library. The assembly rooms, above and owned by the Georgetown club, has a good stage and is admirably adapted to dramatic and musical entertainments. A museum (free), belonging to the Royal Agricultural and Commercial Society, is chiefly devoted to the fauna of British Guiana, but also contains an instructive collection of local economic, mineralogical and botanical exhibits, a miscellaneous collection of foreign birds and mammals, and an interesting series of views of the colony. The botanical gardens to the east of the city are of considerable extent and admirably laid out. The nurseries cover a large area and are devoted chiefly to the raising of plants of economic importance which can be purchased at nominal rates. The collections of ferns and orchids are very fine. In the gardens are also located the fields of the board of agriculture, where experimental work in the growth of sugar-cane, rice, cotton and all tropical plants of economic importance is carried on. Other popular resorts are the sea wall and the promenade gardens in the centre of the city.

The local government of Georgetown is vested in a mayor and town council elected under a very restricted franchise. The city is divided into fourteen wards each with one representative. A councillor must possess, either personally or through his wife, premises within the city of the appraised value of at least $1500. A voter must either own house property of the appraised value of $250 or occupy premises of an annual rental of $240. There are indeed only 297 municipal voters in a population of nearly 50,000. The revenue, just over £50,000 annually, is mainly derived from a direct rate on house property. The colonial government pays rates on its property and also gives a grant-in-aid towards the upkeep of the streets. The expenditure is principally on sanitation, fire brigade, streets, water-supply, street lighting and drainage. Street lighting is carried out under contract by the Demerara Electric Company, which has a monopoly of private lighting and works an excellent tram service. Water for public and domestic purposes is taken from the conservancy of the east coast and is delivered by pumping

throughout the city, but drinking-water is collected in tanks attached to the dwellings from the rain falling on the roofs. The fire brigade is a branch of the police force, half the cost being borne by the rates and half by the general revenue. There is an excellent service of telephones, a branch of the post office, and halfpenny postage within the city boundaries. There are in Georgetown two well-equipped foundries, a dry dock, and factories for the manufacture of rice, cigars, soap, boots, chocolate, candles, aerated waters and ice. Georgetown is connected by rail and ferry with New Amsterdam, by ferry and rail with the west coast of Demerara, and by steamer with all the country districts along the coast and up the navigable reaches of the principal rivers.

(A. G. B.*)

GEORGETOWN, formerly a city of the District of Columbia, U.S.A., and now part (sometimes called West Washington) of the city of Washington, U.S.A., at the confluence of the Potomac river and Rock Creek, and on the Chesapeake and Ohio Canal, about 2½ m. W.N.W. of the National Capitol. Pop. (1890) 14,046; (1900) 14,549. The streets are old-fashioned, narrow and well shaded. On the “Heights” are many fine residences with beautiful gardens; the Monastery and Academy (for girls) of Visitation, founded in 1799 by Leonard Neale, second archbishop of Baltimore; and the college and the astronomical observatory (1842) of Georgetown University. The university was founded as a Roman Catholic Academy in 1789, was opened in 1791, transferred to the Society of Jesus in 1805, authorized in 1815 by Congress to confer college or university degrees, and by the Holy See in 1833 to confer degrees in philosophy and theology, incorporated as Georgetown College by Act of Congress in 1844, and began graduate work about 1856. The college library includes the historical collection of James Gilmary Shea. A school of medicine was opened in 1851, a dental school in 1901 and a school of law in 1870. In 1909-1910 the university had an enrolment of 859 students. Rising in terraces from Rock Creek is Oak Hill Cemetery, a beautiful burying-ground containing the graves of John Howard Payne, the author of “Home, Sweet Home,” Edwin McMasters Stanton and Joseph Henry. On the bank of the Potomac is a brick house which was for several years the home of Francis Scott Key, author of “The Star-Spangled Banner”; on Analostan Island in the river was a home of James Murray Mason; Georgetown Heights was the home of the popular novelist, Mrs Emma Dorothy Eliza Nevitte Southworth (1819-1899). Before the advent of railways Georgetown had an important commerce by way of the Chesapeake and Ohio Canal, by which considerable coal as well as some grain is still brought hither, and of which Georgetown is now a terminus; the canal formerly crossed the Potomac at this point on an aqueduct bridge (1446 ft. long), but in 1887 the crossing was abandoned and the old bridge was purchased by the United States government, which in 1889 constructed a new steel bridge upon the old masonry piers. Chief among the manufactories are several large flour mills—Georgetown flour was long noted for its excellence. There is a very large fish-market here. Georgetown was settled late in the 17th century, was laid out as a town in 1751, chartered as a city in 1789, merged in the District of Columbia in 1871, and annexed to the city of Washington in 1878. In the early days of Washington it was a social centre of some importance, where many members of Congress as well as some cabinet officers and representatives of foreign countries lived and the President gave state dinners; and here were the studio, for two years, of Gilbert Stuart, and “Kalorama,” the residence of Joel Barlow.

GEORGETOWN, a city and the county-seat of Scott county, Kentucky, U.S.A., about 11 miles N. of Lexington. Pop. (1900) 3823 (1677 negroes); (1910) 4533. Georgetown is served by the Cincinnati Southern (Queen & Crescent Route), the Frankfort & Cincinnati, and the Southern railways, and is connected with Lexington by an electric line. It is the seat of Georgetown College (Baptist, co-educational), chartered in 1829 as the successor of Rittenhouse Academy, which was founded in 1798. Georgetown is situated in the Blue Grass region of Kentucky, and the surrounding country is devoted to agriculture and stock-raising. One of the largest independent oil refineries in the country (that of the Indian Refining Co.) is in Georgetown, and among manufactures are bricks, flour, ice, bagging and hemp. The remarkable “Royal Spring,” which rises near the centre of the city, furnishes about 200,000 gallons of water an hour for the city’s water supply, and for power for the street railway and for various industries. The first

settlement was made in 1775, and was named McClellan’s, that name being changed to Lebanon a few years afterwards. In 1790 the place was incorporated as a town under its present name (adopted in honour of George Washington), and Georgetown was chartered as a city of the fourth class in 1894. Bacon College, which developed into Kentucky (now Transylvania) University (see Lexington, Ky.), was established here by the Disciples of Christ in 1836, but in 1839 was removed to Harrodsburg.

GEORGETOWN, a city, a port of entry and the county-seat of Georgetown county, South Carolina, U.S.A., at the head of Winyah Bay, and at the mouth of the Pedee river, about 15 m. from the Atlantic Ocean, and about 55 m. N.E. of Charleston. Pop. (1890) 2895; (1900) 4138 (2718 negroes); (1910) 5530. Georgetown is served by the Georgetown & Western railway, has steamship communication with Charleston, Wilmington, New York City and other Atlantic ports, and, by the Pedee river and its tributaries (about 1000 m. of navigable streams), has trade connexions with a large area of South Carolina and part of North Carolina. The principal public buildings are the post office and custom house. Among the city’s manufactures are lumber, foundry and machine-shop products, naval stores and oars; and there are shad and sturgeon fisheries. The growing of cotton and truck-gardening are important industries in the neighbouring region, and there is considerable trade in such products. The first settlement here was made about 1700; and the town was laid out a short time before 1734. The Winyah Indigo Society grew out of a social club organized about 1740, and was founded in 1757 by a group of planters interested in raising indigo; It long conducted a school (discontinued during the Civil War) which eventually became part of the city’s public school system. In 1780 Georgetown was occupied by a body of Loyalist troops, with whom the American troops had several skirmishes, but on the 10th of August 1781 General Francis Marion forced the evacuation of the town and took possession of it. A few days later, an American named Manson, who had joined the British forces, attacked the town from an armed vessel, and burned about forty houses, the small body of militia being unable to make an effective resistance. General Lafayette first landed on American soil at Georgetown on the 24th of April 1777. Georgetown was incorporated as a town in 1805, and was chartered as a city in 1895.

GEORGETOWN, a city and the county-seat of Williamson county, Texas, U.S.A., on the San Gabriel river, about 25 m. N. by E. of Austin. Pop. (1890) 2447; (1900) 2790 (608 negroes); (1910) 3096. The city is served by the International & Great Northern, and the Missouri, Kansas & Texas railways. Georgetown is the seat of the Southwestern University (Methodist Episcopal, South, co-educational), formed in 1873 (chartered 1875) by the combination of Ruterville College (Methodist Episcopal, at Ruterville, Texas, chartered in 1840, and closed in 1850), McKenzie College (at Clarksville, Texas, founded in 1841 and closed in 1872), Wesleyan College at San Augustine (chartered in 1844, burned a few years later, and not rebuilt), and Soule University at Chapel Hill (chartered in 1856, but closed in 1870). The university includes a fitting school at Georgetown, and a medical department at Dallas, Texas; in 1909 it had an enrolment of 1037 students. The principal manufactures of Georgetown are cotton and cotton-seed oil, and planing-mill products. In Page Park are mineral springs, whose waters have medicinal qualities similar to the famous Karlsbad waters. The first settlement was made here in 1848; and Georgetown was incorporated as a town in 1866, and was chartered as a city in 1890.

GEORGIA, a southern state of the United States of America, one of the thirteen original states, situated between 30° 31′ 39″ and 35° N., and between 81° and 85° 53′ 38″ W. It is bounded N. by Tennessee and North Carolina, E. by South Carolina and the Atlantic Ocean, S. by Florida, and W. by Alabama. The total area of the state is 59,265 sq. m., of which 540 sq. m. are water surface.

The surface of Georgia is divided into five physiographic zones. From the sea coast, which is skirted by fertile, semi-tropical islands, a plain of 35,000 sq. m., known as South Georgia, extends northward to the “fall-line” passing from Augusta, through Milledgeville and Macon, to Columbus. This is a part of the great Atlantic Coastal Plain. For 20 m. from the coast its elevation is 10 ft., then it rises abruptly 70 ft. higher, and 20 m. farther N. another elevation begins, which reaches 575 ft. at Milledgeville, the average elevation of the entire region being 250 ft. North of the line mentioned, and collectively known as North Georgia, are the four other regions, each with well-defined characteristics. The largest and southernmost, a broad belt extending from the “fall-line” to a line passing through Clarkesville, Habersham county, Cartersville, Bartow county and Buchanan, Haralson county (approximately), is known as the Piedmont Belt or Plateau, being a region of faint relief eroded on highly complicated crystalline rocks. The Blue Ridge escarpment, a striking topographic feature in Virginia and the Carolinas, extends into Georgia along the north-eastern border of this belt, but is less strongly developed here than elsewhere, dying out entirely towards the south-west. North of the Piedmont Belt lie the Appalachian Mountains Region and the Great Valley Region, the former to the east, the latter to the west of a dividing line from Cartersville northward. The former region consists of detached mountain masses of crystalline rocks, not yet eroded down to the level of the Piedmont Belt. In Towns county, in the Appalachian Region, is the highest point in the state, Brasstown Bald, also called Enota Mountain (4768 ft.). The Great Valley Region consists of folded sedimentary rocks, extensive erosion having removed the soft layers to form valleys, leaving the hard layers as ridges, both layers running in a N.E.-S.W. direction. In the extreme north-west corner of the state is a small part of the Cumberland Plateau, represented by Lookout and Sand Mts.

On the Blue Ridge escarpment near the N.E. corner of the state is a water-parting separating the waters which find their way respectively N.W. to the Tennessee river, S.W. to the Gulf of Mexico and S.E. to the Atlantic Ocean; indeed, according to B.M. and M.R. Hall (*Water Resources of Georgia*, p. 2), “there are three springs in north-east Georgia within a stone’s throw of each other that send out their waters to Savannah, Ga., to Apalachicola, Fla., and to New Orleans, La.” The water-parting between the waters flowing into the Atlantic and those flowing into the Gulf extends from this point first S.E. for a few miles, then turns S.W. to Atlanta, and from there extends S.S.E. to the Florida line. West of where the escarpment dies out, the Great Valley Region and a considerable portion of the Appalachian Mountains Region are drained by the Coosa, the Tallapoosa and their tributaries, into Mobile Bay, but the Cumberland Plateau, like that part of the Appalachian Mountains Region which lies directly N. of the Blue Ridge escarpment, constitutes a part of the Tennessee Basin. The principal rivers of the state are the Chattahoochee and the Flint, which unite in the S.W. corner to form the Apalachicola; the Ocmulgee (whose western tributary, the Towaliga, falls 96 ft. in less than a quarter of a mile), and the Oconee, which unite in the S.E. to form the Altamaha; and the Savannah, which forms the boundary between Georgia and South Carolina. All of these rise in the upper part of the Piedmont Plateau, through which they pursue a rapid course over rocky beds, and are navigable only south of the “fall-line,” at which and north of which they furnish an abundance of water-power. The upper Savannah river first flows S.W., then turns abruptly S.E., while the Chattahoochee river rises near this point and continues S.W. This is because the upper Savannah[1] was formerly part of the Chattahoochee, but was captured and turned S.E. by headward growth of the Savannah. As a result of the capture there is a deep gorge along the upper Savannah, especially along the branch called the Tallulah river; and the upper Tallulah, in a series of cascades, 2⅔ m. long, falls 525 ft. from the former higher level down to the main bed of the upper Savannah, at Tallulah Falls, a summer resort.

The fauna and flora have no distinctive features. (See United States.)

Climate and Soils.—The climate of Georgia, though temperate, differs considerably in different parts of the state. All the nine climate belts in the United States, except that of southern Florida, are represented within its borders. The lowest mean annual temperature, 40° F. and below, is that of some of the mountain tops of northern Georgia; from the mountain-sides to the Piedmont Plateau this mean temperature varies from 45° to 60°; on the Piedmont Plateau from 60° to 65°; and on the Coastal Plain from 60° to 70°. The July isotherm of 80° crosses the state a little N. of Augusta and Macon, touching the W. boundary at West Point, Troup county. The mean July temperature for the whole state is 81.8°; for the part S. of the 80° isotherm the average temperature for July is between 80° and 85°. The average rainfall for the state is 49.3 in.; the maximum is 71.7 in., at Rabun Gap in the extreme N.E. part of the state; the minimum is 39.4 at Swainsboro, Emanuel county, a little S.E. of the centre of the state.

Georgia is also notable for the variety of its soils. In the Cumberland Plateau and Great Valley Regions are a red or brown loam, rich in decomposed limestone and calcareous shales, and sandy or gravelly loams. In the Piedmont Plateau and Appalachian Mountains Regions the surface soil is generally sandy, but in considerable areas the subsoil is a red clay derived largely from the decomposition of hornblende. By far the greatest variety of soils is found in the Coastal Plain Region. Here the Central Cotton Belt, extending from the “fall-line” as far S.

as a line bisecting Early county in the W. and passing through Baker, Worth, Dooly, Dodge, Laurens, Johnson, Jefferson and Burke counties, has three distinct kinds of soil; a sand, forming what is known as the sand-hill region; red clay derived from silicious rock in the red hills; and grey, sandy soils with a subsoil of yellow loam. South of the Cotton Belt is the Lime Sink Region, which includes Miller, Baker, Mitchell, Colquitt and Worth counties, the northern portions of Decatur, Grady, Thomas, Brooks and Lowndes, the eastern parts of Dooly and Lee, and the eastern portions of Berrien, Irwin, Wilcox, Dodge, and some parts of Burke, Screven and Bulloch. The soft limestone underlying this region is covered, in the uplands, with grey, sandy soils, which have a subsoil of loam; in the lowlands the surface soils are loams, the subsoils clays. Adjoining this region are the pine barrens, which extend S. to a line passing through the northern portions of Pierce, Wayne, Liberty, Bryan and Effingham counties. Here 752
the prevailing soils are grey and sandy with a subsoil of loam, but they are less fertile than those of the Lime Sink or Cotton Belts. The coast counties of the S.E. and generally those on the Florida frontier are not suitable for cultivation, on account of the numerous marshes and swamps, Okefinokee Swamp being 45 m. long and approximately 30 m. wide; but the southern portions of Decatur, Grady, Thomas and Brooks counties are sufficiently elevated for agriculture, and the islands off the coast are exceedingly productive.

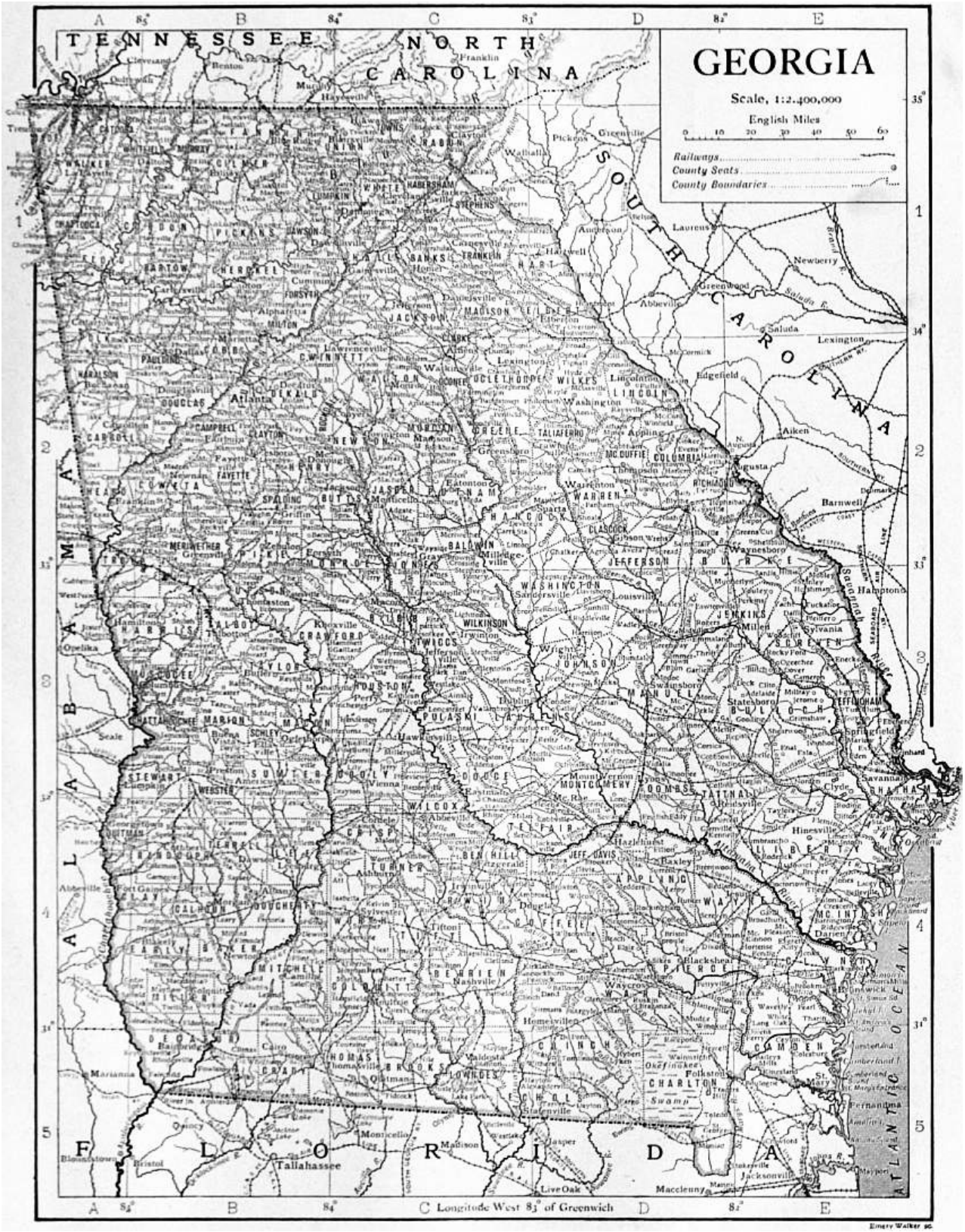
Minerals.—The mineral resources of Georgia are as varied as its climate and soils, a total of thirty-nine different mineral products being found within its borders. The most important is stone: in 1905 the value of the granite quarried in the state was $971,207 (Georgia ranking fifth in the United States), of the marble $774,550 (Georgia ranking third in the United States, Vermont and New York being first and second); in 1908 the granite was valued at $970,832 (Georgia ranking fifth in the United States), and the marble at $916,281 (Georgia ranking second in the United States, Vermont being first). Generally more than one-fourth of the granite is used for paving; curb, building and monument stone are next in importance in the order named. Stone Mountain (1686 ft.) in De Kalb county near Atlanta is a remarkable mass of light-coloured muscovite granite, having a circumference at its base of 7 m. Stone Mountain granite was first quarried about 1850; it is extensively used as building material in Georgia and other southern states. A laminated granite, otherwise like the Stone Mountain granite, is found in De Kalb, Rockdale and Gwinnett counties, and is used for curbing and building. Biotite granites, which take a good polish and are used for monuments and for decoration, are quarried in Oglethorpe and Elbert counties. Georgia marble was first quarried on a large scale in Pickens county in 1884; the pure white marble of this county had been worked for tombstones near Tate, the centre of the marble belt, in 1840; after its commercial exploitation it was used in the capitol buildings of Georgia, Rhode Island, Mississippi and Minnesota, in the Corcoran Art Gallery, Washington, D.C., and in St Luke’s Hospital, New York City. It is sometimes used for the entire building, and sometimes only for decoration. Other colours than the snowy white are found in the main marble belt of the state, which runs from Canton, Cherokee county, 60 m. generally N. to the northern boundary of the state. Other deposits, less well known, are the dark brown and light grey marbles of Whitfield county, which resemble the stone quarried in eastern Tennessee. Limestone and slate are quarried at Rock Mart, Polk county, and there are cement quarries at Cement, near Kingston, Bartow county. Iron deposits occur in Bartow, Polk and Floyd counties, where are the more important brown ores, and (red ores) in Walker and Chattooga counties. The quantity of iron ore mined in Georgia declined from 1890 to 1900; it was 200,842 long tons in 1905 and 321,060 long tons in 1908, when 319,812 tons were brown haematite and 1248 tons were red haematite. Before the discovery of gold in California the Georgia “placers” were very profitable, the earliest mining being in 1829 by placer miners from the fields of Burke county, North Carolina, who began work in what is now White county, and went thence to Habersham and Lumpkin counties. Dahlonega and Auraria, the latter named by John C. Calhoun, who owned a mine there, were the centres of this early gold mining. Work was summarily stopped by Federal troops enforcing the governor’s proclamation in 1831, because of the disorder in the mining region; but it was soon renewed and a mint was established at Dahlonega in 1838. After the discovery of gold in California, mining in Georgia was not renewed on anything but the smallest scale until the early ’eighties. In 1908 the gold product was valued at $56,207 (it was $96,910 in 1905) and the silver product at $106. Up to 1909 the gold product of Georgia (see State Geol. Survey *Bulletin 19*) was about $17,500,000. Extensive clay deposits occur in all parts of the state, and are remarkable for their comparative freedom from impurities and for their high fusion point; the most valuable are sedimentary, and form a belt several miles wide across the middle of the state from Augusta to Columbus. In 1908 the clay products of the state were valued at $1,928,611. More asbestos has been found in Georgia than in any other state of the Union; it occurs in the amphibole form throughout the N. part of the state, and most of the country’s domestic supply comes from the Sall Mountain mine in White county. Manganese ores, found in Bartow, Polk and Floyd counties, were formerly important; in 1896 4096 long tons were mined, in 1905 only 150 tons, and in 1908 none. Bauxite was found in Georgia first of the United States, near Rome, in 1887; the output, principally from Floyd, Bartow and Polk counties, was the entire product of the United States until 1891, and in 1902 was more than half the country’s product, but in 1908, even when combined with the Alabama output, was less than

the amount mined in Arkansas. Coal is not extensively found, but the mine on Sand Mountain, in Walker county, was one of the first opened S. of the Ohio river; in 1908 the value of the coal mined in the state was $364,279 (264,822 short tons), the value of coke at the ovens was $137,524 (39,422 short tons), and the value of ammonium sulphate, coal tar, illuminating gas and gas coke was more than $800,000. Copper was mined in Fannin and Cherokee counties before the Civil War. In 1906 the copper mined was valued at $5057. Corundum was discovered on Laurel Creek in Rabun county in 1871, and was worked there and at Trackrock, Union county, especially between 1880 and 1893, but in later years low prices closed most of the mines. The limestone formations furnished most of the lime for domestic use. Sandstone, ochre, slate, soapstone, graphite are also mined, and lead, zinc, barytes, gypsum and even diamonds have been discovered but not exploited.

Agriculture.—The principal occupation in Georgia is agriculture, which in 1900 engaged seven-tenths of the land surface of the state and the labour of three-fifths of the population, ten years old and over, who are employed in profitable occupations. The products are so diversified that, with the exception of some tropical fruits of California and Florida, almost everything cultivated in the United States can be produced. The chief staple is cotton, of which a valuable hybrid called the Floradora, a cross of long and short staple, has been singularly successful. Cotton is raised in all counties of the state except Rabun, Towns and Fannin in the extreme north, and about one-third of the total cultivated land of the state was devoted to it in 1900-1907. In 1899-1904 the crop exceeded that of the other cotton-producing states except Texas, and in 1899, 1900 and 1903 Mississippi, averaging 1,467,121 commercial bales per annum; the crop in 1904 was 1,991,719 bales, and in 1907-1908 the crop was 1,815,834 bales, second only to the crop of Texas. The cause of this extensive cultivation of cotton is not a high average yield per acre, but the fact that before 1860 “Cotton was King,” and that the market value of the staple when the Civil War closed was so high that farmers began to cultivate it to the exclusion of the cereals, whose production, Indian corn excepted, showed a decline during each decade from 1879 to 1899. But in the ’nineties the price of the cotton fell below the cost of production, owing to the enormous supply, and this was accompanied by economic depression. These conditions have caused some diversification of crops, and successful experiments in cattle-raising, movements encouraged by the Department of Agriculture and the leading newspapers.

The principal cereals cultivated are Indian corn (product, 53,750,000 bushels in 1908) and wheat; the cultivation of the latter, formerly remunerative, declined on account of the competition of the Western States, but revived after 1899, largely owing to the efforts of the Georgia Wheat Growers’ Association (organized in 1897), and in 1908 the yield was 2,208,000 bushels. The sugar-cane crop declined in value after 1890, and each year more of it was made into syrup. In 1908 the tobacco crop was 2,705,625 ℔, and the average farm price was 35 cents, being nearly as high as that of the Florida crop; Sumatra leaf for wrappers is grown successfully. The acreage and product of tobacco and peanuts increased from 1890 to 1900 respectively 188% and 319.2%, and 92.6% and 129.9%, and in the production of sweet potatoes Georgia was in 1899 surpassed only by North Carolina. Alfalfa and grasses grow well. Truck farming and the cultivation of orchard and small fruits have long been remunerative occupations; the acreage devoted to peaches doubled between 1890 and 1900. Pecan nuts are an increasingly important crop.

Agriculture in Georgia was in a state of transition at the beginning of the 20th century. Owing to the abundance of land and to negro slavery, exploitative methods of cultivation were employed before the Civil War, and such methods, by which lands after being worked to exhaustion are deserted for new fields, had not yet been altogether abandoned. One reason for this was that, according to the census of 1900, 36.9% of the farms were operated by negroes, of whom 86% were tenants who desired to secure the greatest possible product without regard to the care of the soil. Consequently there were large tracts of untilled “waste” land; but these rapidly responded to fertilization and rotation of crops, often yielding 800 to 1200 ℔ of cotton per acre, and Georgia in 1899 used more fertilizers than any other state in the Union. Another feature of agriculture in Georgia was the great increase in the number of farms, the average size of plantations having declined from 440 acres in 1860 to 117.5 in 1900, or almost 75%, while the area in cultivation increased only 15.6% between 1850 and 1900. The tenantry system was also undergoing a change—the share system which developed in the years succeeding the Civil War being replaced by a system of cash rental.



(Click to enlarge.)

Manufactures.—Although excelled by Alabama in the manufacture of mineral products, and by North Carolina and South Carolina in the number and output of cotton mills, in 1900 and in 1905 Georgia surpassed each of those states in the total value of factory products, which was, however, less than the value of the factory products of Louisiana and Virginia among the southern states. The chief features of this industrial activity are its early beginning and steady, constant development. As far back as 1850 there were 1522 manufacturing establishments (35 of which were cotton mills) in the state, whose total product was valued at $7,082,075. Despite the Civil War, there was some advance during each succeeding decade, the most prosperous relatively being that from 1880 to 1890. In 1900 the number of establishments was 7504, an increase of 75.1% over the number in 1890; the capital invested was $89,789,656, an increase of 57.7%, and the value of products ($106,654,527) was 54.8% more than in 1890. Of the 7504 establishments in 1900, 3015 were conducted under the “factory system,” and had a capital of

$79,303,316 and products valued at $94,532,368. In 1905 there were 3219 factories, with a capital of $135,211,551 (an increase of 70.5% over 1900), and a gross product valued at $151,040,455 (59.8% greater than the value of the factory product in 1900).

The most important manufacturing industries are those that depend upon cotton for raw material, with a gross product in 1900 valued at $26,521,757. In that year[2] there were 67 mills engaged in the manufacture of cotton goods, with a capital of $24,158,159, and they yielded a gross product valued at $18,457,645; the increase between 1900 and 1905 was actually much larger (and proportionately very much larger) than between 1890 and 1900; the number of factories in 1905 was 103 (an increase of 53.7% over 1900); their capital was $42,349,618 (75.3% more than in 1900); and their gross product was valued at $35,174,248 (an increase of 90.6% since 1900). The rank of Georgia among the cotton manufacturing states was seventh in 1900 and fourth in 1905. Cotton-seed oil and cake factories increased in number from 17 to 43 from 1890 to 1900, and to 112 in 1905, and the value of their product increased from $1,670,196 to $8,064,112, or 382.8% in 1890-1900, and to $13,539,899 in 1905, or an increase of 67.9% over 1900, and in 1900 and in 1905 the state ranked second (to Texas) in this industry in the United States. This growth in cotton manufactures is due to various causes, among them being the proximity of raw material, convenient water-power, municipal exemption from taxation and the cheapness of labour. The relation between employer and employee is in the main far more personal and kindly than in the mills of the Northern States.

The forests of Georgia, next to the fields, furnish the largest amount of raw material for manufactures. The yellow pines of the southern part of the state, which have a stand of approximately 13,778,000 ft., yielded in 1900 rosin and turpentine valued at $8,110,468 (more than the product of any other state in the Union) and in 1905 valued at $7,705,643 (second only to the product of Florida). From the same source was derived most of the lumber product valued[3] in 1900 at $13,341,160 (more than double what it was in 1890) and in 1905 at $16,716,594. The other important woods are cypress, oak and poplar.

Fourth in value in 1905 (first, cotton goods; second, lumber and timber; third, cotton-seed oil and cake) were fertilizers, the value of which increased from $3,367,353 in 1900 to $9,461,415 in 1905, when the state ranked first of the United States in this industry; in 1900 it had ranked sixth.

Communications.—Means of transportation for these products are furnished by the rivers, which are generally navigable as far north as the “fall line” passing through Augusta, Milledgeville, Macon and Columbus; by ocean steamship lines which have piers at St Mary’s, Brunswick, Darien and Savannah; and by railways whose mileage in January 1909 was 6,871.8 m. The most important of the railways are the Central of Georgia, the Southern, the Atlantic Coast Line, the Seaboard Air Line, the Georgia and the Georgia Southern & Florida. In 1878 a state railway commission was established which has mandatory power for the settlement of all traffic problems and makes annual reports.

Population.—The population of Georgia in 1880 was 1,542,180; in 1890 1,837,353, an increase of 19.1%; in 1900 2,216,331, a further increase of 20.6%[4]; in 1910, 2,609,121. Of the 1900 population, 53.3% were whites and 46.7% were negroes,[5] the centre of the black population being a little south of the “fall line.” Here the negroes increased, from 1890 to 1900, faster than the whites in eighteen counties, but in northern Georgia, where the whites are in the majority, the negro population declined in twelve counties. Also the percentage of negro illiteracy is higher in northern Georgia than in other parts of the state, the percentage of negro male illiterates of voting age being 38.3% in Atlanta in 1900, and in Savannah only 30.7%. The population of Georgia has a very slight foreign-born element (.6% in 1900) and a small percentage (1.7% in 1900) of people of foreign parentage. The urban population (*i.e.* the population in places of 2500 inhabitants and over) was 15.6% of the total in 1900, and the number of incorporated cities, towns and villages was 372. Of these only forty had a population exceeding 2000, and thirteen exceeding 5000. The largest city in 1900 was Atlanta, the capital since 1868 (Louisville, Jefferson county, was the capital in 1795-1804, and Milledgeville in 1804-1868), with 89,872 inhabitants. Savannah ranked second with 54,244, and Augusta third with 39,441. In 1900 the other cities in the state with a population of more than 5000 were: Macon (23,272), Columbus (17,614), Athens (10,245), Brunswick (9081), Americus (7674), Rome (7291), Griffin (6857), Waycross (5919), Valdosta (5613), and Thomasville (5322).

The total membership of the churches in 1906 was about 1,029,037, of whom 596,319 were Baptists, 349,079 were Methodists, 24,040 were Presbyterians, 19,273 were Roman Catholics, 12,703 were Disciples of Christ, 9790 were Protestant Episcopalians, and 5581 were Congregationalists.

Government.—The present constitution, which was adopted in 1877,[6] provides for a system of government similar in general to that of the other states (see United States). The executive officials are elected for a term of two years, and the judges of the Supreme Court and of the court of appeals for six years, while those of the superior court and of the ordinaries and the

justices of the peace are chosen every four years. Before 1909 all male citizens of the United States at least twenty-one years of age (except those mentioned below), who had lived in the state for one year immediately preceding an election and in the county six months, and had paid their taxes, were entitled to vote. From the suffrage and the holding of office are excluded idiots and insane persons and all those who have been convicted of treason, embezzlement, malfeasance in office, bribery or larceny, or any crime involving moral turpitude and punishable under the laws of the state by imprisonment in the penitentiary—this last disqualification, however, is removable by a pardon for the offence. Before 1909 there was no constitutional discrimination aimed against the exercise of the suffrage by the negro, but in fact the negro vote had in various ways been greatly reduced. By a constitutional amendment adopted by a large majority at a special election in October 1908, new requirements for suffrage, designed primarily to exclude negroes, especially illiterate negroes, were imposed (supplementary to the requirements mentioned above concerning age, residence and the payment of taxes), the amendment coming into effect on the 1st of January 1909: in brief this amendment requires that the voter shall have served in land or naval forces of the United States or of the Confederate States or of the state of Georgia in time of war, or be lawfully descended from some one who did so serve; or that he be a person of good character who proves to the satisfaction of the registrars of elections that he understands the duties and obligations of a citizen; or that he read correctly in English and (unless physically disabled) write any paragraph of the Federal or state constitution; or that he own 40 acres of land or property valued at $500 and assessed for taxation. After the 1st of January 1915 no one may 754
qualify as a voter under the first or second of these clauses (the “grandfather” and “understanding” clauses); but those who shall have registered under their requirements before the 1st of January 1915 thus become voters for life.

The governor, who receives a salary of $5000, must be at least thirty years old, must at the time of his election have been a citizen of the United States for fifteen years and of the state for six years, and “shall not be eligible to re-election after the expiration of a second term, for the period of four years.” In case of his “death, removal or disability,” the duties of his office devolve in the first instance upon the president of the Senate, and in the second upon the speaker of the House of Representatives. The governor’s power of veto extends to separate items in appropriation bills, but in every case his veto may be overridden by a two-thirds vote of the legislature. An amendment to the constitution may be proposed by a two-thirds vote of the legislature, and comes into effect on receiving a majority of the popular vote. Members of the Senate must be at least twenty-five years old, must be citizens of the United States, and must, at the time of their election, have been citizens of the state for four years, and of the senatorial district for one year; representatives must be at least twenty-one years old, and must, at the time of their election, have been citizens of the state for two years. By law, in Georgia, lobbying is a felony.

Habitual intoxication, wilful desertion for three years, cruel treatment, and conviction for an offence the commission of which involved moral turpitude and for which the offender has been sentenced to imprisonment for at least two years, are recognized as causes for divorce. All petitions for divorce must be approved by two successive juries, and a woman holds in her own name all property acquired before and after marriage. Marriage between the members of the white and negro races is prohibited by law.

As the result of the general campaign against child labour, an act was passed in 1906 providing that no child under 10 shall be employed or allowed to labour in or about any factory, under any circumstances; after the 1st of January 1907 no child under 12 shall be so employed, unless an orphan with no other means of support, or unless a widowed mother or disabled or aged father is dependent on the child’s labour, in which case a certificate to the facts, holding good for one year only, is required; after the 1st of January 1908 no child under 14 shall be employed in a factory between the hours of 7 P.M. and 6 A.M.; after the same date no child under 14 shall be employed in any factory without a certificate of school attendance for 12 weeks (of which 6 weeks must be consecutive) of the preceding year; no child shall be employed without the filing of an affidavit as to age. Making a false affidavit as to age or as to other facts required by the act, and the violation of the act by any agent or representative of a factory or by any parent or guardian of a child are misdemeanours.

In 1907 a state law was passed prohibiting after the 1st of January 1908 the manufacture or sale of intoxicating liquors; nine-tenths of the counties of the state, under local option laws, were already “dry” at the passage of this bill. The law permits druggists to keep for sale no other form of alcoholic drink than pure alcohol; physicians prescribing alcohol must fill out a blank, specifying the patient’s ailment, and certifying that alcohol is necessary; the prescription must be filled the day it is dated, must be served directly to the physician or to the patient, must not call for more than a pint, and may not be refilled.[7]

The state supports four benevolent institutions: a lunatic asylum for the whites and a similar institution for the negroes, both at Milledgeville, an institute for the deaf and dumb at Cave Spring, and an academy for the blind at Macon. There are also a number of private charitable institutions, the oldest being the Bethesda orphan asylum, near Savannah, founded by George Whitefield in 1739. The Methodist, Baptist, Roman Catholic and Protestant Episcopal Churches, and the Hebrews of the state also support homes for orphans. A penitentiary was established in 1817 at Milledgeville. In 1866 the lease system was introduced, by which the convicts were leased for a term of years to private individuals. In 1897 this was supplanted by the contract system, by which a prison commission accepted contracts for convict labour, but the prisoners were cared for by state officials. But the contract system for convicts and the peonage system (under which immigrants were held in practical slavery while they "worked out" advances made for passage-money, &c.) were still sources of much injustice. State laws made liable to prosecution for misdemeanour any contract labourer who, having received advances, failed for any but good cause to fulfil the contract; or any contract labourer who made a second contract without giving notice to his second employer of a prior and unfulfilled contract; or any employer of a labourer who had not completed the term of a prior contract. In September 1908, after an investigation which showed that many wardens had been in the pay of convict lessees and that terrible cruelty had been practised in convict camps, an extra session of the legislature practically put an end to the convict lease or contract system; the act then passed provided that after the 31st of March 1909, the date of expiration of leases in force, no convicts may be leased for more than twelve months and none may be leased at all unless there are enough convicts to supply all demands for convict labour on roads made by counties, each county to receive its *pro rata* share on a population basis, and to satisfy all demands made by municipalities which thus secure labour for $100 per annum (per man) paid into the state treasury, and all demands made by the state prison farm and factory established by this law.

Education.—Georgia's system of public instruction was not instituted until 1870, but as early as 1817 the legislature provided a fund for the education in the private schools of the state of children of indigent parents. The constitution of 1868 authorized "a thorough system of general education, to be for ever free to all children of the State," and in 1870 the first public school law was enacted. Education, however, has never been made compulsory. The constitution, as amended in 1905, provides that elections on the question of local school taxes for counties or for school districts may be called upon a petition signed by one-fourth of the qualified voters of the county, or district, in question; under this provision several counties and a large number of school districts are supplementing the general fund. But the principal source of the annual school revenue is a state tax; the fund derived from this tax, however, is not large enough. In 1908 the common school fund approximated $3,786,830, of which amount the state paid $2,163,200 and about $1,010,680 was raised by local taxation. In 1908 69% of the school population (79% of whites; 58% of negroes) were enrolled in the schools; in 1902 it was estimated that the negroes, 52.3% of whom (10 years of age and over) were illiterates (*i.e.* could not write or could neither read nor write) in 1900 (81.6% of them were illiterate in 1880), received the benefit of only about a fifth of the school fund. Of the total population, 10 years of age and over, 30.5% were illiterates in 1900—49.9% were illiterates in 1880—and as regards the whites of native birth alone, Georgia ranked ninth in illiteracy, in 1900, among the states and territories of the Union. Of the illiterates about four-fifths were negroes in 1900. In addition to the public schools, the state also supports the University of Georgia; and in 1906 $235,000 was expended for the support of higher education. In 1906-1907 eleven agricultural and mechanical arts colleges were established, one in each congressional district of the state. Of the colleges of the university, Franklin was the first state college chartered in America (1785); the Medical College of Georgia, at Augusta, was opened in 1829; the State College of Agriculture and Mechanic Arts was established at Athens in 1872; the North Georgia Agricultural College, at Dahlonega, was opened in 1873; the Georgia School of Technology, at Atlanta, in 1888; the Georgia Normal and Industrial College (for women), in Milledgeville, in 1899; the Georgia State Normal School, at Athens, in 1895; the Georgia State Industrial College for Coloured Youth, near Savannah, in 1890; the School of Pharmacy, at Athens, in 1903; and the School of Forestry, and the Georgia State College of Agriculture, at Athens, in 1906. Affiliated with the university, but not receiving state funds, are three preparatory schools, the South Georgia Military and Agricultural College at Thomasville, the Middle Georgia Military and Agricultural College at Milledgeville, and the West Georgia Agricultural and Mechanical College at Hamilton. Among the institutions generally grouped as denominational are—Baptist: Mercer University, at Macon (Penfield, 1837; Macon, 1871), Shorter College (1877) at Rome, Spelman Seminary (1881) in Atlanta for negro women and girls, and Bessie Tift College, formerly Monroe College (1849) for women, at Forsyth; Methodist Episcopal: Emory College (1836), at Oxford, and Wesleyan Female College (1836) at Macon, both largely endowed by George Ingraham Seney (1837-1893), and the latter one of the earliest colleges for women in the country; Methodist Episcopal Church, South: Young

Harris College (1855) at Young Harris, Andrew Female College (1854) at Cuthbert, and Dalton Female College (1872) at Dalton; Presbyterian: Agnes Scott College at Decatur; and African Methodist Episcopal: Morris Brown College (1885) at Atlanta. A famous school for negroes is the non-sectarian Atlanta University (incorporated in 1867, opened in 1869), which has trained many negroes for teaching and other professions. Non-sectarian colleges for women are: Lucy Cobb Institute (1858) at Athens, Cox College (1843) at College Park, near Atlanta, and Brenau College Conservatory (1878) at Gainesville.

Finance.—The assessed value of taxable property in 1910 was about $735,000,000. A general property tax, which furnishes about four-fifths of the public revenue, worked so inequitably that a Board of Equalization was appointed in 1901. By the Constitution the tax rate is limited to $5 on the thousand, and, as the rate of taxation has increased faster than the taxable property, the state has been forced to contract several temporary loans since 1901, none of which has exceeded $200,000, the limit for each year set by the Constitution. On the 1st of January 1910 the bonded debt was $6,944,000, mainly incurred by the extravagance of the Reconstruction administration (see *History*, below). Each year $100,000 of this debt is paid off, and there are annual appropriations for the payment of interest (about $303,260 in 1910). The state owns the Western & Atlantic railway (137 m. long) from Chattanooga, Tennessee, to Atlanta, which has valuable terminal facilities in both cities, and which in 1910 was estimated to be worth $8,400,240 (more than the amount of the bonded debt); this railway the state built in 1841-1850, and in 1890 leased for 29 years, at an annual rental of $420,012, to the Nashville, Chattanooga & St Louis railway.

Banking in Georgia is in a prosperous condition. The largest class of depositors are the farmers, who more and more look to the banks for credit, instead of to the merchants and cotton speculators. Hence the number of banks in agricultural districts is increasing. The state treasurer is the bank examiner, and to him all banks must make a quarterly statement and submit their books for examination twice a year. The legal rate of interest is 7%, but by contract it may be 8%.

History.—Georgia derives its name from King George II. of Great Britain. It was the last to be established of the English colonies in America. Its formation was due to a desire of the British government to protect South Carolina from invasion by the Spaniards from Florida and by the French from Louisiana, as well as to the desire of James Edward Oglethorpe (*q.v.*) to found a refuge for the persecuted Protestant sects and the unfortunate but worthy indigent classes of Europe. A charter was granted in 1732 to “the Trustees for establishing the colony of Georgia in America,” and parliament gave £10,000 to the enterprise. The first settlement was made at Savannah in 1733 under the personal supervision of Oglethorpe. The early colonists were German Lutherans (Salzburgers), Piedmontese, Scottish Highlanders, Swiss, Portuguese Jews and Englishmen; but the main tide of immigration, from Virginia and the Carolinas, did not set in until 1752. As a bulwark against the Spanish, the colony was successful, but as an economic experiment it was a failure. The trustees desired that there should be grown in the colony wine grapes, hemp, silk and medical plants (barilla, kali, cubeb, caper, madder, &c.) for which England was dependent upon foreign countries; they required the settlers to plant mulberry trees, and forbade the sale of rum, the chief commercial staple of the colonies. They also forbade the introduction of negro slaves. Land was leased by military tenure, and until 1739 grants were made only in male tail and alienations were forbidden. The industries planned for the colony did not thrive, and as sufficient labour could not be obtained, the importation of slaves was permitted under certain conditions in 1749. About the same time the House of Commons directed the trustees to remove the prohibition on the sale of rum. In 1753 the charter of the trustees expired and Georgia became a royal province.

Under the new regime the colony was so prosperous that Sir James Wright (1716-1785), the last of the royal governors, declared Georgia to be “the most flourishing colony on the continent.” The people were led to revolt against the mother country through sympathy with the other colonies rather than through any grievance of their own. The centre of revolutionary ideas was St John’s Parish, settled by New Englanders (chiefly from Dorchester, Massachusetts). The Loyalist sentiment was so strong that only five of the twelve parishes sent representatives to the First Provincial Congress, which met on the 18th of January 1775, and its delegates to the Continental Congress therefore did not claim seats in that assembly. But six months later all the parishes sent representatives to another Provincial Congress which met on the 4th of July 1775. Soon afterward the royal government collapsed and the administration of the colony was assumed by a council of safety.

The war that followed was really a severe civil conflict, the Loyalist and Revolutionary parties being almost equal in numbers. In 1778 the British seized Savannah, which they held until 1782, meanwhile reviving the British civil administration, and in 1779 they captured Augusta and Sunbury; but after 1780 the Revolutionary forces were generally successful. Civil affairs also fell into confusion. In 1777 a state constitution was adopted, but two factions soon

appeared in the government, led by the governor and the executive council respectively, and harmony was not secured until 1781.

Georgia's policy in the formation of the United States government was strongly national. In the constitutional convention of 1787 its delegates almost invariably gave their support to measures designed to strengthen the central government. Georgia was the fourth state to ratify (January 2, 1788), and one of the three that ratified unanimously, the Federal Constitution. But a series of conflicts between the Federal government and the state government caused a decline of this national sentiment and the growth of States Rights theories.

First of these was the friction involved in the case, before the Supreme Court of the United States, of *Chisolm* v. *Georgia*, by which the plaintiff, one Alexander Chisolm, a citizen of South Carolina, secured judgment in 1793 against the state of Georgia (see 2 Dallas Reports 419). In protest, the Georgia House of Representatives, holding that the United States Supreme Court had no constitutional power to try suits against a sovereign state, resolved that any Federal marshal who should attempt to execute the court's decision would be "guilty of felony, and shall suffer death, without benefit of clergy, by being hanged." No effort was made to execute the decision, and in 1798 the Eleventh Amendment to the Federal Constitution was adopted, taking from Federal courts all jurisdiction over any suit brought "against one of the United States by citizens of another state, or by citizens or subjects of any foreign state."

The position of Congress and of the Supreme Court with reference to Georgia's policy in the Yazoo Frauds also aroused distrust of the Federal government. In 1795 the legislature granted for $500,000 the territory extending from the Alabama and Coosa rivers to the Mississippi river and between 35° and 31° N. lat. (almost all of the present state of Mississippi and more than half of the present state of Alabama) to four land companies, but in the following year a new legislature rescinded the contracts on the ground that they had been fraudulently and corruptly made, as was probably the case, and the rescindment was embodied in the Constitution of 1798., In the meantime the United States Senate had appointed a committee to inquire into Georgia's claim to the land in question, and as this committee pronounced that claim invalid, Congress in 1800 established a Territorial government over the region. The legislature of Georgia remonstrated but expressed a willingness to cede the land to the United States, and in 1802 the cession was ratified, it being stipulated among other things that the United States should pay to the state $1,250,000, and should extinguish "at their own expense, for the use of Georgia, as soon as the same can be peaceably obtained on reasonable terms," the Indian title to all lands within the state of Georgia. Eight years later the Supreme Court of the United States decided in the case of *Fletcher* v. *Peck* (6 Cranch 87) that such a rescindment as that in the new state constitution was illegal, on the ground that a state cannot pass a law impairing the obligation of contracts; and at an expense of more than four millions of dollars the Federal government ultimately extinguished all claims to the lands.

This decision greatly irritated the political leaders of Georgia, and the question of extinguishing the Indian titles, on which there had long been a disagreement, caused further and even more serious friction between the Federal and state authorities. The National government, until the administration of President Jackson, regarded the Indian tribes as sovereign nations with whom it alone had the power to treat, while Georgia held that the tribes were dependent communities with no other right to the soil than that of tenants at will. In 1785 Georgia made treaties with the Creeks by which those Indians ceded to the state their lands S. and W. of the Altamaha river and E. of the Oconee river, but after a remonstrance of one of their half-breed chiefs Congress decided that the cessions were invalid, and the National government negotiated, in 1790, a new treaty which ceded only the lands E. of the Oconee. The state appealed to the National government to endeavour to secure further cessions, but none had been made when, in 1802, the United States assumed its obligation to extinguish all Indian titles within the state. Several cessions were made between 1802 and 1824, but the state in the latter year remonstrated in vigorous terms against the dilatory manner in which the National government was discharging its obligation, and the effect of this was that in 1825 a treaty was negotiated at Indian Springs by which nearly all the Lower Creeks agreed to exchange their remaining lands in Georgia for equal territory beyond the Mississippi. But President J.Q. Adams, learning that this treaty was not approved by the entire Creek nation, authorized a new one, signed at Washington in 1826, by which the treaty of 1825 was abrogated and the Creeks kept certain lands W. of the Chattahoochee. The Georgia government, under the leadership of Governor George M. Troup (1780-1856), had proceeded to execute the first treaty, and the legislature declared the second treaty illegal and unconstitutional. In reply to a communication of President Adams early in 1827 that the United States would take strong measures to enforce its policy, Governor Troup declared that he felt it his duty to resist to the utmost any military attack which the government of the United States should think proper to make, and ordered the military companies to prepare to resist "any hostile invasion of the territory of this state."

But the strain produced by these conditions was relieved by information that new negotiations had been begun for the cession of all Creek lands in Georgia. These negotiations were completed late in the year.

There was similar conflict in the relation of the United States and Georgia with the Cherokees. In 1785 the Cherokees of Georgia placed themselves under the protection of the Federal government, and in 1823 their chiefs, who were mostly half-breeds, declared: “It is the fixed and unalterable determination of this nation never again to cede one foot more of land,” and that they could not “recognize the sovereignty of any state within the limits of their territory”; in 1827 they framed a constitution and organized a representative government. President Monroe and President J.Q. Adams treated the Cherokees with the courtesy due to a sovereign nation, and held that the United States had done all that was required to meet the obligation assumed in 1802. The Georgia legislature, however, contended that the United States had not acted in good faith, declared that all land within the boundaries of the state belonged to Georgia, and in 1828 extended the jurisdiction of Georgia law to the Cherokee lands. Then President Jackson, holding that Georgia was in the right on the Indian question, informed the Cherokees that their only alternative to submission to Georgia was emigration. Thereupon the chiefs resorted to the United States Supreme Court, which in 1832 declared that the Cherokees formed a distinct community “in which the laws of Georgia have no force,” and annulled the decision of a Georgia court that had extended its jurisdiction into the Cherokee country (*Worcester* v. *Georgia*). But the governor of Georgia declared that the decision was an attempt at usurpation which would meet with determined resistance, and President Jackson refused to enforce the decree. The President did, however, work for the removal of the Indians, which was effected in 1838.

On account of these conflicts a majority of Georgians adopted the principles of the Democratic-Republican party, and early in the 19th century the people were virtually unanimous in their political ideas. Local partisanship centred in two factions: one, led by George M. Troup, which represented the interests of the aristocratic and slave-holding communities; the other, formed by John Clarke (1766-1832) and his brother Elijah, found support among the non-slave-holders and the frontiersmen. The cleavage of these factions was at first purely personal; but by 1832 it had become one of principle. Then the Troup faction under the name of States Rights party, endorsed the nullification policy of South Carolina, while the Clarke faction, calling itself a Union party, opposed South Carolina’s conduct, but on the grounds of expediency rather than of principle. On account, however, of its opposition to President Jackson’s attitude toward nullification, the States Rights party affiliated with the new Whig party, which represented the national feeling in the South, while the Union party was merged into the Democratic party, which emphasized the sovereignty of the states.

The activity of Georgia in the slavery controversy was important. As early as 1835 the legislature adopted a resolution which asserted the legality of slavery in the Territories, a principle adopted by Congress in the Kansas Bill in 1854, and in 1847 ex-Governor Wilson Lumpkin (1783-1870) advocated the organization of the Southern states to resist the aggression of the North. Popular opinion at first opposed the Compromise of 1850, and some politicians demanded immediate secession from the Union; and the legislature had approved the Alabama Platform of 1848. But Congressmen Robert Toombs, Alexander H. Stephens, Whigs, and Howell Cobb, a Democrat, upon their return from Washington, contended that the Compromise was a great victory for the South, and in a campaign on this issue secured the election of such delegates to the state convention (at Milledgeville) of 1850 that that body adopted on the 10th of December, by a vote of 237 to 19, a series of conciliatory resolutions, since known as the “Georgia Platform,” which declared in substance: (1) that, although the state did not wholly approve of the Compromise, it would “abide by it as a permanent adjustment of this sectional controversy,” to preserve the Union, as the thirteen original colonies had found compromise necessary for its formation; (2) that the state “will and ought to resist, even (as a last resort) to the disruption of every tie that binds her to the Union,” any attempt to prohibit slavery in the Territories or a refusal to admit a slave state. The adoption of this platform was accompanied by a party reorganization, those who approved it organizing the Constitutional Union party, and those who disapproved, mostly Democrats, organizing the Southern Rights party; the approval in other states of the Georgia Platform in preference to the Alabama Platform (see Alabama) caused a reaction in the South against secession. The reaction was followed for a short interval by a return to approximately the former party alignment, but in 1854 the rank and file of the Whigs joined the American or Know-Nothing party while most of the Whig leaders went over to the Democrats. The Know-Nothing party was nearly destroyed by its crushing defeat in 1856 and in the next year the Democrats by a large majority elected for governor Joseph Emerson Brown (1821-1894) who by three successive re-elections was continued in that office until the close of the Civil War. Although Governor Brown represented the poorer class of white citizens he had taken a course in law at Yale College, had practised law, and at the time of his election was judge of a superior court; although he had never held

slaves he believed that the abolition of slavery would soon result in the ruin of the South, and he was a man of strong convictions. The Kansas question and the attitude of the North toward the decision in the Dred Scott case were arousing the South when he was inaugurated the first time, and in his inaugural address he clearly indicated that he would favour secession in the event of any further encroachment on the part of the North. In July 1859 Senator Alfred Iverson (1798-1874) declared that in the event of the election of a Free-Soil resident in 1860 he would favour the establishment of an independent confederacy; later in the same year Governor Brown expressed himself to a similar effect and urged the improvement of the military service. On the 7th of November following the election of President Lincoln the governor, in a special message to the legislature, recommended the calling of a convention to decide the question of secession, and Alexander H. Stephens was about the only prominent political leader who contended that Lincoln's election was insufficient ground for such action. On the 17th of November the legislature passed an act directing the governor to order an election of delegates on the 2nd of January 1861 and their meeting in a convention on the 16th. On the 19th this body passed an ordinance of secession by a vote of 208 to 89. Already the first regiment of Georgia Volunteers, under Colonel Alexander Lawton (1818-1896) had seized Fort Pulaski at the mouth of the Savannah river and now Governor Brown proceeded to Augusta and seized the Federal arsenal there. Toward the close of the same year, however, Federal warships blockaded Georgia's ports, and early in 1862 Federal forces captured Tybee Island, Fort Pulaski, St Mary's, Brunswick and St Simon Island. Georgia had responded freely to the call for volunteers, but when the Confederate Congress had passed, in April 1862, the Conscript Law which required all white men (except those legally exempted from service) between the ages of 18 and 35 to enter the Confederate service, Governor Brown, in a correspondence with President Davis which was continued for several months, offered serious objections, his leading contentions being that the measure was unnecessary as to Georgia, unconstitutional, subversive of the state's sovereignty, and therefore "at war with the principles for the support of which Georgia entered into this revolution."

In 1863 north-west Georgia was involved in the Chattanooga campaign. In the following spring Georgia was invaded from Tennessee by a Federal army under General William T. Sherman; the resistance of General Joseph E. Johnston and General J.B. Hood proved ineffectual; and on the 1st of September Atlanta was taken. Then Sherman began his famous "march to the sea," from Atlanta to Savannah, which revealed the weakness of the Confederacy. In the spring of 1865, General J.H. Wilson with a body of cavalry entered the state from Alabama, seized Columbus and West Point on the 16th of April, and on the 10th of May captured Jefferson Davis, president of the Confederacy, at Irwinville in Irwin county.

In accord with President Andrew Johnson's plan for reorganizing the Southern States, a provisional governor, James Johnson, was appointed on the 17th of June 1865, and a state convention reformed the constitution to meet the new conditions, rescinding the ordinance of secession, abolishing slavery and formally repudiating the state debt incurred in the prosecution of the war. A governor and legislature were elected in November 1865, the legislature ratified the Thirteenth Amendment on the 9th of December and five days later the governor-elect was inaugurated. But both the convention and legislature incurred the suspicion and ill-will of Congress; the convention had congratulated the president on his policy, memorialized him on behalf of Jefferson Davis, and provided pensions for disabled Confederate soldiers and the widows of those who had lost their lives during the war, while the legislature passed apprenticeship, labour and vagrancy laws to protect and regulate the negroes, and rejected the Fourteenth Amendment. Although the civil rights were conferred upon the freedmen, Congress would not tolerate the political incapacity and social inferiority which the legislature had assigned to them, and therefore Georgia was placed under military government, as part of the third military district, by the Reconstruction Act of the 2nd of March 1867. Under the auspices of the military authorities registration of electors for a new state convention was begun and 95,168 negroes and 96,333 whites were registered. The acceptance of the proposition to call the convention and the election of many conscientious and intelligent delegates were largely due to the influence of ex-Governor Brown, who was strongly convinced that the wisest course for the South was to accept quickly what Congress had offered. The convention met in Atlanta on the 9th of December 1867 and by March 1868 had revised the constitution to meet the requirements of the Reconstruction Acts. The constitution was duly adopted by popular vote, and elections were held for the choice of a governor and legislature. Rufus Brown Bullock (b. 1834), Republican, was chosen governor, the Senate had a majority of Republicans, but in the House of Representatives a tie vote was cast for the election of a speaker. On the 21st of July the Fourteenth Amendment was ratified, and a section of the state constitution (which denied the power of state courts to entertain against any resident of the state suits founded on contracts existing on the 15th of June 1865) was repealed by the legislature in pursuance of the congressional "Omnibus Bill" of the 25th of June 1868, and as evidence of the restoration of Georgia to the Union the congressmen were seated on the 25th

of July in that year.

But in September of the same year the Democrats in the state legislature, being assisted by some of the white Republicans, expelled the 27 negro members and seated their defeated white contestants, relying upon the legal theory that the right to hold office belonged only to those citizens designated by statute, the common law or custom. In retaliation the 41st Congress excluded the state's representatives on a technicality, and, on the theory that the government of Georgia was a provisional organization, passed an act requiring the ratification of the Fifteenth Amendment before the admission of Georgia's senators and representatives. The war department now concluded that the state was still subject to military authority, and placed General A.H. Terry in command. With his aid, and that of Congressional requirements that all members of the legislature must take the Test Oath and none be excluded on account of colour, a Republican majority was secured for both houses, and the Fifteenth Amendment was ratified. Georgia was now finally admitted to the Union by Act of Congress, on the 15th of July 1870.

The Reconstruction period in Georgia is remarkable for its comparative moderation. Although there was great political excitement, there was not as much extravagance in public administration as there was in other Southern States, the state debt increasing approximately from $6,600,000 to $16,000,000. The explanation lies in the fact that there were comparatively few "carpet-baggers" or adventurers in the state, and that a large number of conservative citizens, under the leadership of ex-Governor Brown, supported the Reconstruction policy of Congress and joined the Republican party.

The election of 1871 gave the Democrats a majority in the legislature; Governor Bullock, fearing impeachment, resigned, and at a special election James M. Smith was chosen to fill the unexpired term. After that the control of the Democrats was complete. In 1891 the Populist party was organized, but it never succeeded in securing a majority of the votes in the state.

List of Governors

I. *Administration of the Trustees.*	
James Edward Oglethorpe[8]	1732-1743
William Stephens[9]	1743-1751
Henry Parker[9]	1751-1753
Patrick Graham[9]	1753-1754
II. *Royal Administration.*	
John Reynolds	1754-1757
Henry Ellis	1757-1760
Sir James Wright	1760-1782
III. *Provincial Administration.*	
William Ewen[10]	1775
Archibald Bulloch[11]	1776
Button Gwinnett[11]	1777
Jonathan Bryan[11]	1777
IV. *Georgia as a State.*	
John A. Treutlen[12]	1777-1778
John Houston	1778-1779
John Wereat[13]	1779
George Walton	1779-1780
Richard Hawley	1780
Stephen Heard[13]	1780-1781
Myrick Davies[13]	1781
Nathan Brownson	1781-1782
John Martin	1782-1783
Lyman Hall	1783-1785
Samuel Elbert	1785-1786
Edward Telfair	1786-1787
George Matthews	1787-1788
George Handley	1788-1789

George Walton	1789-1790	Democratic-Republican
Edward Telfair	1790-1793	" "
George Matthews	1793-1796	" "

Jared Irwin	1796-1798	”	”
James Jackson	1798-1801	”	”
David Emanuel	1801	”	”
Josiah Tattnall	1801-1802	”	”
John Milledge	1802-1806	”	”
Jared Irwin	1806-1809	”	”
David B. Mitchell	1809-1813	”	”
Peter Early	1813-1815	”	”
David B. Mitchell	1815-1817	”	”
William Rabun[14]	1817-1819	”	”
Matthew Talbot[14]	1819	”	”
John Clarke	1819-1823	”	”
George M. Troup	1823-1827	”	”
John Forsyth	1827-1829	”	”
George R. Gilmer	1829-1831	National Republican	
Wilson Lumpkin	1831-1835	Democratic-Republican	
William Schley	1835-1837	Union	
George Gilmer	1837-1839	Democrat	
Charles J. McDonald	1839-1843	Union	
George W. Crawford	1843-1847	Whig	
George W.B. Towns	1847-1851	Democrat	
Howell Cobb	1851-1853	Constitutional Union	
Herschell V. Johnson	1853-1856	Democrat	
Joseph E. Brown	1857-1865	”	
James Johnson[15]	1865	”	
Charles J. Jenkins	1865-1868	”	
Thomas H. Ruger	1868	”	
Rufus B. Bullock	1868-1871	Republican	
Benjamin Conley[14]	1871-1872	”	
James M. Smith	1872-1876	Democrat	
Alfred H. Colquitt	1876-1882	”	
Alexander H. Stephens	1882-1883	”	
James S. Boynton[14]	1883	”	
Henry D. McDaniel	1883-1886	”	
John B. Gordon	1886-1890	”	
W.J. Northen	1890-1894	”	
W.Y. Atkinson	1894-1898	”	
A.D. Candler	1898-1902	”	
Joseph M. Terrell	1902-1907	”	
Hoke Smith	1907-1909	”	
Joseph M. Brown	1909-1911	”	
Hoke Smith	1911-	”	

A brief bibliography, chiefly of historical materials, is given by U.B. Phillips in his monograph “Georgia and State Rights,” in vol. ii. of the *Annual Report of the American Historical Association for 1901* (Washington, 1902). Valuable information concerning the resources and products of the state is given in the publications of the Department of Agriculture, which include weekly and monthly *Bulletins*, biennial *Reports* and a volume entitled *Georgia, Historical and Industrial* (Atlanta, 1901). The Reports of the United States Census (especially the Twelfth Census for 1900 and the special census of manufactures for 1905) should be consulted, and *Memoirs of Georgia* (2 vols., Atlanta, Ga., 1895) contains chapters on industrial conditions.

The principal sources for public administration are the annual reports of the state officers, philanthropic institutions, the prison commission and the railroad commission, and the revised Code of Georgia (Atlanta, 1896), adopted in 1895; see also L.F. Schmeckebier’s “Taxation in Georgia” (*Johns Hopkins University Studies*, vol. xviii.) and “Banking in Georgia” (*Banker’s Magazine*, vol. xlviii.). Education and social conditions are treated in C.E. Jones’s *History of Education in Georgia* (Washington, 1890), the Annual Reports of the School Commissioner, and various magazine articles, such as “Georgia Cracker in the Cotton Mill” (*Century Magazine*, vol. xix.) and “A Plea for Light” (*South Atlantic Quarterly*, vol. iii.). The view of slavery given in Frances A. Kemble’s *Journal of a Residence on a Georgia Plantation in 1838-1839* (New York, 1863) should be compared with R.Q. Mallard’s *Plantation Life before Emancipation* (Richmond, Va., 1897), and with F.L. Olmsted’s *A Journey in the Seaboard Slave States* (New York, 1856).

The best book for the entire field of Georgia history is Lawton B. Evans’s *A Student’s History of Georgia* (New York, 1898), a textbook for schools. This should be supplemented by C.C. Jones’s *Antiquities of the Southern Indians, particularly of the Georgia Tribes* (New York, 1873), for the aborigines; W.B. Stevens’s *History of Georgia to 1798* (2 vols., Philadelphia, 1847-1859) and C.C. Jones, jun., History of Georgia (2 vols., Boston, 1883) for the Colonial and

Revolutionary periods; C.H. Haskins's *The Yazoo Land Companies* (Washington, 1891); the excellent monograph (mentioned above) by U.B. Phillips for politics prior to 1860; Miss Annie H. Abel's monograph "The History of Events Resulting in Indian Consolidation West of the Mississippi," in vol. i. of the *Annual Report of the American Historical Association for 1906* (Washington, 1908) for a good account of the removal of the Indians from Georgia; the judicious monograph by E.C. Woolley, *Reconstruction in Georgia* (New York, 1901); and I.W. Avery's *History of Georgia from 1850 to 1881* (New York, 1881), which is marred by prejudice but contains material of value. *The Confederate Records of the State of Georgia* were published at Atlanta in 1909. See also: E.J. Harden's *Life of George M. Troup* (Savannah, 1840); R.M. Johnston and W.H. Browne, *Life of Alexander H. Stephens (Philadelphia, 1878), and Louis Pendleton, Life of Alexander H. Stephens* (Philadelphia, 1907); P.A. Stovall's *Robert Toombs* (New York, 1892); H. Fielder's *Life, Times and Speeches of Joseph E. Brown* (Springfield, Mass., 1883) and C.C. Jones, jun., *Biographical Sketches of Delegates from Georgia to the Continental Congress* (New York, 1891). There is much valuable material, also, in the publications (beginning with 1840) of the Georgia Historical Society (see the list in vol. ii. of the *Report of the American Historical Association* for 1905).

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1 According to the usual nomenclature, the branch flowing S.W. is called the Chattooga; this unites with the Tallulah to form the Tugaloo, which in turn unites with the Kiowee to form the Savannah proper.

2 The manufacturing statistics for 1900 which follow are not those given in the Twelfth Census, but are taken from the *Census of Manufactures*, 1905, the 1900 figures here given being only for "establishments on a factory basis," and thus being comparable with those of 1905. In 1890 there were 53 mills with a capital of $17,664,675 and a product valued at $12,035,629.

3 In these valuations for 1900 and for 1905 the rough lumber dressed or remanufactured in planing mills enters twice into the value of the product.

4 The population of the state was 82,548 in 1790, 162,686 in 1800, 252,433 in 1810, 340,989 in 1820, 516,823 in 1830, 691,392 in 1840, 906,185 in 1850, 1,057,286 in 1860, and 1,184,100 in 1870.

5 This negro percentage includes 211 Chinese, Japanese and Indians.

6 The state has had four other constitutions—those of 1777, 1789, 1798 and 1868.

7 Owing to the custom which holds in Georgia of choosing state senators in rotation from each of the counties making up a senatorial district, it happened in 1907 that few cities were represented directly by senators chosen from municipalities. It is believed that this fact contributed to the passage of the prohibition law.

8 *De facto.*

9 President of the Colony.

10 President of the Council of Safety.

11 President of Georgia.

12 First Governor under a State Constitution.

13 President Executive Council and *de facto* Governor.

14 President of Senate.

15 Provisional.

GEORGIA, a former kingdom of Transcaucasia, which existed historically for more than 2000 years. Its earliest name was Karthli or Karthveli; the Persians knew it as Gurjistan, the Romans and Greeks as Iberia, though the latter placed Colchis also in the west of Georgia. Vrastan is the Armenian name and Gruzia the Russian. Georgia proper, which included Karthli and Kakhetia, was bounded on the N. by Ossetia and Daghestan, on the S. by the principalities of Erivan and Kars, and on the W. by Guria and Imeretia; but the kingdom also included at different times Guria, Mingrelia, Abkhasia, Imeretia and Daghestan, and extended from the Caucasus range on the N. to the Aras or Araxes on the S. It is now divided between the Russian governments of Tiflis and Kutais, under which headings further geographical particulars are given. (See also Caucasia.)

History.—According to traditional accounts, the Georgian (Karthlian), Kakhetian, Lesghian, Mingrelian and other races of Transcaucasia are the descendants of Thargamos, great-grandson of Japheth, son of Noah, though Gen. x. 3 makes Togarmah to be the son of Gomer,

who was the son of Japheth. These various races were subsequently known under the general name of Thargamosides. Karthlos, the second son of Thargamos, is the eponymous king of his race, their country being called Karthli after him. Mtskhethos, son of Karthlos, founded the city of Mtskhetha (the modern Mtskhet) and made it the capital of his kingdom. We come, however, to firmer historic ground when we read that Georgia was conquered by Alexander the Great, or rather by one of his generals. The Macedonian yoke was shaken off by Pharnavaz or Pharnabazus, a prince of the royal race, who ruled from 302 to 237 B.C. All through its history Georgia, being on the outskirts of Armenia and Persia, both of them more powerful neighbours than itself, was at times more or less closely affected by their destinies. In this way it was sometimes opposed to Rome, sometimes on terms of friendship with Byzantium, according as these were successively friendly or hostile to the Armenians and the Persians. In the end of the 2nd century B.C. the last Pharnavazian prince was dethroned by his own subjects and the crown given to Arsaces, king of Armenia, whose son Arshag, ascending the throne of Georgia in 93 B.C., established there the Arsacid dynasty. This close association with Armenia brought upon the country an invasion (65 B.C.) by the Roman general Pompey, who was then at war with Mithradates, king of Pontus and Armenia; but Pompey did not establish his power permanently over Iberia. A hundred and eighty years later the Emperor Trajan penetrated (A.D. 114) into the heart of the country, and chastised the Georgians; yet his conquest was only a little more permanent than Pompey's. During one of the internecine quarrels, which were not infrequent in Georgia, the throne fell to Mirhan or Mirian (265-342), a son of the Persian king, who had married a daughter of Asphagor, the last sovereign of the Arsacid dynasty.

With Mirian begins the Sassanian dynasty. He and his subjects were converted to Christianity by a nun Nuno (Nino), who had escaped from the religious persecutions of Tiridates, king of Armenia. Mirian erected the first Christian church in Georgia on the site now occupied by the cathedral of Mtskhet. In or about the year 371 Georgia was overrun by the Persian king Shapur or Sapor II., and in 379 a Persian general built the stronghold of Tphilis (afterwards Tiflis) as a counterpoise to Mtskhet. The Persian grasp upon Georgia was loosened by Tiridates, who reigned from 393 to 405. One of Mirian's successors, Vakhtang (446-499), surnamed Gurgaslan or Gurgasal, the Wolf-Lion, established a patriarchate at Mtskhet and made Tphilis his capital. This sovereign, having conquered Mingrelia and Abkhasia, and subdued the Ossetes, made himself master of a large part of Armenia. Then, co-operating for once with the king of Persia, he led an army into India; but towards the end of his reign there was enmity between him and the Persians, against whom he warred unsuccessfully. His son Dachi or Darchil (499-514) upon ascending the throne transferred the seat of government permanently from Mtskhet to Tphilis (Tiflis). Again Persia stretched out her hand over Georgia, and proved a formidable menace to the existence of the kingdom, until, owing to the severe pressure of the Turks on the one side and of the Byzantine Greeks on the other, she found it expedient to relax her grasp. The Georgians, seizing the opportunity, appealed (571) to the Byzantine emperor, Justin II. who gave them a king in the person of Guaram, a prince of the Bagratid family of Armenia, conferring upon him the title, not of king, but of viceroy. Thus began the dynasty of the Bagratids, who ruled until 1803.

This was not, however, the first time that Byzantine influence had been effectively exercised in Georgia. As early as the reign of Mirian, in the 3rd century, the organizers of the early Georgian church had looked to Byzantium, the leading Christian power in the East, for both instruction and guidance, and the connexion thus begun had been strengthened as time went on. From this period until the Arab (*i.e.* Mahommedan) invasions began, the authority of Byzantium was supreme in Georgia. Some seventy years after the Bagratids began to rule in Georgia the all-conquering Arabs appeared on the frontiers of the country, and for the next one hundred and eighty years they frequently devastated the land, compelling its inhabitants again and again to accept Islam at the sword's point. But it was not until the death of the Georgian king Ashod (787-826) that they completely subdued the Caucasian state and imposed their will upon it. Nevertheless they were too much occupied elsewhere or too indifferent to its welfare to defend it against alien aggressors, for in 842 Bogha, a Turkish chief, invaded the country, and early in the 10th century the Persians again overran it. But a period of relief from these hostile incursions was afforded by the reign of Bagrat III. (980-1014). During his father's lifetime he had been made king of Abkhasia, his mother belonging to the royal house of that land, and after ascending the Georgian throne he made his power felt far beyond the frontiers of his hereditary dominions, until his kingdom extended from the Black Sea to the Caspian, while Armenia, Azerbaijan and Kirman all paid him tribute. Not only did he encourage learning and patronize the fine arts, but he built, in 1003, the cathedral at Kutais, one of the finest examples extant of Georgian architecture. During the reign of Bagrat IV. (1027-1072) the Seljuk Turks more than once burst, after 1048, into the country from Asia Minor, but they were on the whole successfully repulsed, although they plundered Tiflis. During the reign of the next king, George II., they again devastated Tiflis. But once more fortune changed after the accession of David II. (1089-1125), surnamed the Renovator, one of the greatest of Georgian

kings. With the help of the Kipchaks, a Mongol or Turkish race, from the steppe lands to the north of the Caucasus, whom he admitted into his country, David drove the Seljuks out of his domains and forced them back over the Armenian mountains. Under George III. (1156-1184), a grandson of David II., Armenia was in part conquered, and Ani, one of its capitals, taken. George's daughter Thamar or Tamara, who succeeded him, reigned over the kingdom as left by David II. and further extended her power over Trebizond, Erzerum, Tovin (in Armenia) and Kars. These successes were continued by her son George IV. (1212-1223), who conquered Ganja (now Elisavetpol) and repulsed the attacks of the Persians; but in the last years of his reign there appeared (1220 and 1222) the people who were to prove the ruin of Georgia, namely the Mongol hosts of Jenghiz Khan, led by his sons. George IV. was succeeded by his sister Rusudan, whose capital was twice captured by the Persians and her kingdom overrun and fearfully devastated by the Mongols in 1236. Then, after a period of wonderful recovery under George V. (1318-1346), who conquered Imeretia and reunited it to his crown, Georgia was again twice (1386 and 1393-1394) desolated by the Mongols under Timur (Tamerlane), prince of Samarkand, who on the second occasion laid waste the entire country with fire and sword, and crushed it under his relentless heel until the year 1403. Alexander I. (1413-1442) freed his country from the last of the Mongols, but at the end of his reign divided his territory between his three sons, whom he made sovereigns of Imeretia, Kakhetia and Karthli (Georgia) respectively. The first mentioned remained a separate state until its annexation to Russia in 1810; the other two were soon reunited.

Political relations between Russia and Georgia began in the end of the same century, namely in 1492, when the king of Kakhetia sought the protection of Ivan III. during a war between the Turks and the Persians. In the 17th century the two states were brought into still closer relationship. In 1619, when Georgia was harried by Shah Abbas of Persia, Theimuraz (1629-1634), king of Georgia, appealed for help to Michael, the first of the Romanov tsars of Russia, and his example was followed later in the century by the rulers of other petty Thargamosid or Caucasian states, namely Imeretia and Guria. In 1638 the prince of Mingrelia took the oath of allegiance to the Russian tsar, and in 1650 the same step was taken by the prince of Imeretia. Vakhtang VI. of Georgia put himself under the protection of Peter the Great early in the 18th century. When Persia fell into the grip of the Afghans early in the 18th century the Turks seized the opportunity, and, ousting the Persians from Georgia, captured Tiflis and compelled Vakhtang to abdicate. But in 1735 they renounced all claim to supremacy over the Caucasian states. This left Persia with the predominating influence, for though Peter the Great extorted from Persia (1722) her prosperous provinces beside the Caspian, he left the mountaineers to their own dynastic quarrels. Heraclius II. of Georgia declared himself the vassal of Russia in 1783, and when, twelve years later, he was hard pressed by Agha Mahommed, shah of Persia, who seized Tiflis and laid it in ruins, he appealed to Russia for help. The appeal was again renewed by the next king of Georgia, George XIII., in 1798, and in the following year he renounced his crown in favour of the tsar, and in 1801 Georgia was converted into a Russian province. The state of Guria submitted to Russia in 1829.

(J. T. Be.)

Ethnology.—Of the three main groups into which the Caucasian races are now usually 760
divided, the Georgian is in every respect the most important and interesting. It has accordingly largely occupied the attention of Orientalists almost incessantly from the days of Klaproth. Yet such are the difficulties connected with the origin and mutual relations of the Caucasian peoples that its affinities are still far from being clearly established. Anton von Schiefner and P.V. Uslar, however, arrived at some negative conclusions valuable as starting-points for further research. In their papers, published in the *Memoirs* of the St Petersburg Imperial Academy of Sciences and elsewhere (1859 et seq.), they finally disposed of the views of Bopp and Brosset (1836), who attempted on linguistic grounds to connect the Georgians with the Indo-European family. They also clearly show that Max Müller's "Turanian" theory is untenable, and they go a long way towards proving that the Georgian, with all the other Caucasian languages except the Ossetian, forms a distinct linguistic family absolutely independent of all others. This had already been suspected by Klaproth, and the same conclusion was arrived at by Fr. Müller and Zagarelli.

Uslar's "Caucasian Family" comprises the following three great divisions:

1. Western Group. Typical races: Circassians and Abkhasians.
2. Eastern Group. Typical races: Chechens and Lesghians.
3. Southern Group. Typical race: Georgians.

Here the term "family" must be taken in a far more elastic sense than when applied, for instance, to the Indo-European, Semitic or Eastern Polynesian divisions of mankind. Indeed the three groups present at least as wide divergences as are found to exist between the Semitic and Hamitic linguistic families. Thus, while the Abkhasian of group 1 is still at the

agglutinating, the Lesghian of group 2 has fairly reached the inflecting stage, and the Georgian seems still to waver between the two. In consequence of these different stages of development, Uslar hesitated finally to fix the position of Georgian in the family, regarding it as possibly a connecting link between groups 1 and 2, but possibly also radically distinct from both.

Including all its numerous ramifications, the Georgian or southern group occupies the greater part of Transcaucasia, reaching from about the neighbourhood of Batum on the Black Sea eastwards to the Caspian, and merging southwards with the Armenians of Aryan stock. It comprises altogether nine subdivisions, as in the subjoined table:

1. The Georgians Proper, who are the Iberians of the ancients and the Grusians of the Russians, but who call themselves Karthlians, and who in medieval times were masters of the Rion and Upper Kura as far as its confluence with the Alazan.
2. The Imeretians, west of the Suram mountains as far as the river Tskheniz-Tskhali.
3. The Gurians, between the Rion and Lazistan.
4. The Lazis of Lazistan on the Black Sea.
5. The Svanetians, Shvans or Swanians, on the Upper Ingur and Tskheniz-Tskhali rivers.
6. The Mingrelians, between the rivers Tskheniz-Tskhali, Rion, Ingur and the Black Sea.
7. The Tushes or Mosoks
8. The Pshavs or Ph'chavy
9. The Khevsurs

about the headstreams of the Alazan and Yora rivers.

The representative branch of the race has always been the Karthlians. It is now pretty well established that the Georgians are the descendants of the aborigines of the Pambak highlands, and that they found their way to their present homes from the south-east some four or five thousand years ago, possibly under pressure from the great waves of Aryan migration flowing from the Iranian tableland westwards to Asia Minor and Europe. The Georgians proper are limited on the east by the Alazan, on the north by the Caucasus, on the west by the Meskes hills, separating them from the Imeretians, and on the south by the Kura river and Kara-dagh and Pambak mountains. Southwards, however, no hard and fast ethnical line can be drawn, for even immediately south of Tiflis, Georgians, Armenians and Tatars are found intermingled confusedly together.

The Georgian race, which represents the oldest elements of civilization in the Caucasus, is distinguished by some excellent mental qualities, and is especially noted for personal courage and a passionate love of music. The people, however, are described as fierce and cruel, and addicted to intemperance, though Max von Thielmann (*Journey in the Caucasus*, &c., 1875) speaks of them as "rather hard drinkers than drunkards." Physically they are a fine athletic race of pure Caucasian type; hence during the Moslem ascendancy Georgia supplied, next to Circassia, the largest number of female slaves for the Turkish harems and of recruits for the Osmanli armies, more especially for the select corps of the famous Mamelukes.

The social organization rested on a highly aristocratic basis, and the lowest classes were separated by several grades of vassalage from the highest. But since their incorporation with the Russian empire, these relations have become greatly modified, and a more sharply defined middle class of merchants, traders and artisans has been developed. The power of life and death, formerly claimed and freely exercised by the nobles over their serfs, has also been expressly abolished. The Georgians are altogether at present in a fairly well-to-do condition, and under Russian administration they have become industrious, and have made considerable moral and material progress.

Missionaries sent by Constantine the Great introduced Christianity about the beginning of the 4th century. Since that time the people have, notwithstanding severe pressure from surrounding Mahommedan communities, remained faithful to the principles of Christianity, and are still amongst the most devoted adherents of the Orthodox Greek Church. Indeed it was their attachment to the national religion that caused them to call in the aid of the Christian Muscovites against the proselytizing attempts of the Shiite Persians—a step which ultimately brought about their political extinction.

As already stated, the Karthli language is not only fundamentally distinct from the Indo-European linguistic family, but cannot be shown to possess any clearly ascertained affinities with either of the two northern Caucasian groups. It resembles them chiefly in its phonetic system, so that according to Rosen (*Sprache der Lazen*) all the languages of central and western Caucasus might be adequately rendered by the Georgian alphabet. Though certainly

not so harsh as the Avar, Lesghian and other Daghestan languages, it is very far from being euphonious, and the frequent recurrence of such sounds as *ts, ds, thz, kh, khh, gh* (Arab. غ), *q* (Arab. ق), for all of which there are distinct characters, renders its articulation rather more energetic and rugged than is agreeable to ears accustomed to the softer tones of the Iranian and western Indo-European tongues. It presents great facilities for composition, the laws of which are very regular. Its peculiar morphology, standing midway between agglutination and true inflexion, is well illustrated by its simple declension common to noun, adjective and pronoun, and its more intricate verbal conjugation, with its personal endings, seven tenses and incorporation of pronominal subject and object, all showing decided progress towards the inflecting structure of the Indo-European and Semitic tongues.

Georgian is written in a native alphabet obviously based on the Armenian, and like it attributed to St Mesropius (Mesrop), who flourished in the 5th century. Of this alphabet there are two forms, differing so greatly in outline and even in the number of the letters that they might almost be regarded as two distinct alphabetic systems. The first and oldest, used exclusively in the Bible and liturgical works, is the square or monumental Khutsuri, *i.e.* "sacerdotal," consisting of 38 letters, and approaching the Armenian in appearance. The second is the Mkhedrūli khēli, *i.e.* "soldier's hand," used in ordinary writing, and consisting of 40 letters, neatly shaped and full of curves, hence at first sight not unlike the modern Burmese form of the Pali.

Of the Karthli language there are several varieties; and, besides those comprised in the above table, mention should be made of the Kakhetian current in the historic province of Kakhetia. A distinction is sometimes drawn between the Karthlians proper and the Kakhetians, but it rests on a purely political basis, having originated with the partition in 1424 of the ancient Iberian estates into the three new kingdoms of Karthlinia, Kakhetia and Imeretia. On the other hand, both the Laz of Lazistan and the Svanetian present such serious structural and verbal differences from the common type that they seem to stand rather in the relation of sister tongues than of dialects to the Georgian proper. All derive obviously from a common source, but have been developed independently of each other. The Tush or Mosok appears to be fundamentally a Kistinian or Chechen idiom affected by Georgian influences.

The Bible is said to have been translated into Georgian as early as the 5th century. The extant version, however, dates only from the 8th century, and is attributed to St Euthymius. But even so, it is far the most ancient work known to exist in the language. Next in importance is, perhaps, the curious poem entitled *The Amours of Turiel and Nestan Darejan*, or *The man clothed in the panther's skin*, attributed to Rustevel, who lived during the prosperous reign of Queen Thamar (11th century). Other noteworthy compositions are the national epics of the *Baramiani* and the *Rostomiani*, and the prose romances of *Visramiani* and *Darejaniani*, the former by Sarg of Thmogvi, the latter by Mosi of Khoni. Apart from these, the great bulk of Georgian literature consists of ecclesiastical writings, hymns sacred and profane, national codes and chronicles.

BIBLIOGRAPHY.—The standard authority on the history is M.F. Brosset's translation of the Georgian chronicles under the title of *Histoire de la Géorgie* (5 vols., St Petersburg, 1849-1858); but compare also Khakanov, *Histoire de Géorgie* (Paris, 1900). See further A. Leist, *Das georgische Volk* (Dresden, 1903); M. de Villeneuve, *La Géorgie* (Paris, 1870); O. Wardrop, *The Kingdom of Georgia* (London, 1888); and Langlois, *Numismatique géorgienne* (Paris, 1860). For the philology see Zagarelli, *Examen de la littérature relative à la grammaire géorgienne* (1873); *Friedrich Müller, Grundriss der Sprachwissenschaft* (1887), iii. 2; Leist, *Georgische Dichter* (1887); Erskert, *Sprachen des kaukasischen Stammes* (1895). For other points as to anthropology, Michel Smirnow's paper in *Revue d'anthropologie* (April 15, 1878); Chantre, *Recherches anthropologiques dans le Caucase* (1885-1887); and Erckert, *Der Kaukasus und seine Völker* (1887).

GEORGIAN BAY, the N.E. section of Lake Huron, separated from it by Manitoulin Island and the peninsula comprising the counties of Grey and Bruce, Ontario. It is about 100 m. long and 50 m. wide, and is said to contain 30,000 islands. It receives numerous rivers draining a large extent of country; of these the chief are the French river draining Lake Nipissing, the Maganatawan draining a number of small lakes, the Muskoka draining the Muskoka chain of lakes (Muskoka, Rosseau, Joseph, &c.) and the Severn draining Lake Simcoe. Into its southern extremity, known as Nottawasaga Bay, flows the river of the same name. The Trent valley canal connects Georgian Bay with the Bay of Quinte and Lake Ontario, and a canal system has

long been projected to Montreal by way of the French and Ottawa rivers and Lake Nipissing.

GEORGSWALDE, a town of Bohemia, Austria, 115 m. N.E. of Prague by rail. Pop. (1900) 8131, including Neu-Georgswalde, Wiesenthal and Philippsdorf, which form together a single commune. Georgswalde is one of the oldest industrial places of Bohemia, and together with the neighbouring town of Rumburg is the principal centre of the linen industry. The village of Philippsdorf, now incorporated with Georgswalde, has become since 1866 a famous place of pilgrimage, owing to the miracles attributed to an image of the Virgin, placed now in a magnificent new church (1885).

GEPHYREA, the name used for several groups of worm-like animals with certain resemblances but of doubtful affinity. In the article "Annelida" in the 9th edition of this Encyclopaedia, W.C. McIntosh followed the accepted view in associating in this group the *Echiuridae*, *Sipunculidae* and *Priapulidae*. E. Ray Lankester, in the preface to the English translation of C. Gegenbaur's *Comparative Anatomy* (1878), added the *Phoronidae* to these forms. Afterwards the same author (article "Zoology," *Ency. Brit.*, 9th ed.) recognized that the *Phoronidae* had other affinities, and placed the other "gephyreans" in association with the Polyzoa as the two classes of a phylum *Podaxonia*. In the present state of knowledge the old group *Gephyrea* is broken up into *Echiuroidea* (*q.v.*) or *Gephyrea armata*, which are certainly Annelids; the *Sipunculoidea* (*q.v.*) or *Gephyrea achaeta*, an independent group, certainly coelomate, but of doubtful affinity; the *Priapuloidea* (*q.v.*), equally of doubtful affinity; and the *Phoronidea* (*q.v.*), which are almost certainly *Hemichordata*.

GERA, a town of Germany, capital of the principality of Reuss-Schleiz (called also Reuss younger line), situated in a valley on the banks of the White Elster, 45 m. S.S.W. of Leipzig on the railway to Probstzella. Pop. (1885) 34,152; (1905) 47,455. It has been mostly rebuilt since a great fire in 1780, and the streets are in general wide and straight, and contain many handsome houses. There are three Evangelical churches and one Roman Catholic. Among other noteworthy buildings are the handsome town-hall (1576, afterwards restored) and the theatre (1902). Its educational establishments include a gymnasium, a commercial and a weaving school. The castle of Osterstein, the residence of the princes of Reuss, dates from the 9th century, but has been almost entirely rebuilt in modern times. Gera is noted for its industrial activity. Its industries include wool-weaving and spinning, dyeing, iron-founding, the manufacture of cotton and silk goods, machinery, sewing machines and machine oil, leather and tobacco, and printing (books and maps) and flower gardening.

Gera (in ancient chronicles *Geraha*) was raised to the rank of a town in the 11th century, at which time it belonged to the counts of Groitch. In the 12th century it came into the possession of the lords of Reuss. It was stormed and sacked by the Bohemians in 1450, was two-thirds burned down by the Swedes in 1639 during the Thirty Years' War, and suffered afterwards from great conflagrations in 1686 and 1780, being in the latter year almost completely destroyed.

GERALDTON, a town in the district of Victoria, West Australia, on Champion Bay, 306 m. by rail N.W. of Perth. Pop. (1901) 2593. It is the seat of a Roman Catholic bishop, an important seaport carrying on a considerable trade with the surrounding gold-fields and agricultural

districts, the centre of a considerable railway system and an increasingly popular seaside resort. The harbour is safe and extensive, having a pier affording accommodation for large steamers. The chief exports are gold, copper, lead, wool and sandalwood.

GÉRANDO, MARIE JOSEPH DE (1772-1842), French philosopher, was born at Lyons on the 29th of February 1772. When the city was besieged in 1793 by the armies of the Republic, de Gérando took up arms, was made prisoner and with difficulty escaped with his life. He took refuge in Switzerland, whence he afterwards fled to Naples. In 1796 the establishment of the Directory allowed him to return to France. At the age of twenty-five he enlisted as a private in a cavalry regiment. About this time the Institute proposed as a subject for an essay this question,—"What is the influence of symbols on the faculty of thought?" De Gérando gained the prize, and heard of his success after the battle of Zürich, in which he had distinguished himself. This literary triumph was the first step in his upward career. In 1799 he was attached to the ministry of the interior by Lucien Bonaparte; in 1804 he became general secretary under Champagny; in 1805 he accompanied Napoleon into Italy; in 1808 he was nominated master of requests; in 1811 he received the title of councillor of state; and in the following year he was appointed governor of Catalonia. On the overthrow of the empire, de Gérando was allowed to retain this office; but having been sent during the hundred days into the department of the Moselle to organize the defence of that district, he was punished at the second Restoration by a few months of neglect. He was soon after, however, readmitted into the council of state, where he distinguished himself by the prudence and conciliatory tendency of his views. In 1819 he opened at the law-school of Paris a class of public and administrative law, which in 1822 was suppressed by government, but was reopened six years later under the Martignac ministry. In 1837 he was made a baron. He died at Paris on the 9th of November 1842.

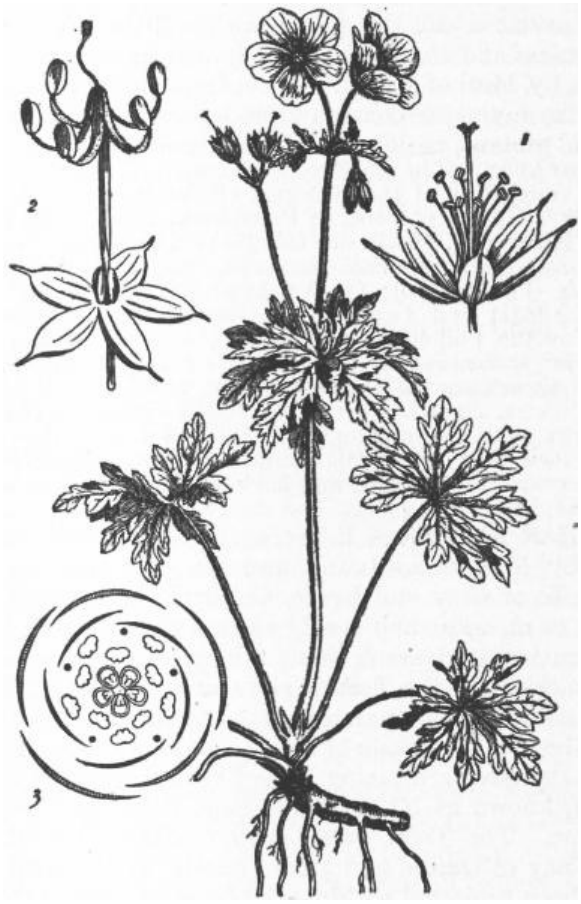
De Gérando's best-known work is his *Histoire comparée des systèmes de philosophie relativement aux principes des connaissances humaines* (Paris, 1804, 3 vols.). The germ of this work had already appeared in the author's *Mémoire de la génération des connaissances humaines* (Berlin, 1802), which was crowned by the Academy of Berlin. In it de Gérando, after a rapid review of ancient and modern speculations on the origin of our ideas, singles out the theory of primary ideas, which he endeavours to combat under all its forms. The latter half of the work, devoted to the analysis of the intellectual faculties, is intended to show how all human knowledge is the result of experience; and reflection is assumed as the source of our ideas of substance, of unity and of identity. It is divided into two parts, the first of which is purely historical, and devoted to an exposition of various philosophical systems; in the second, which comprises fourteen chapters of the entire work, the distinctive characters and value of these systems are compared and discussed. In spite of the disadvantage that it is impossible to separate advantageously the history and critical examination of any doctrine in the arbitrary manner which de Gérando chose, the work has great merits. In correctness of detail and comprehensiveness of view it was greatly superior to every work of the same kind that had hitherto appeared in France. During the Empire and the first years of the Restoration, de Gérando found time to prepare a second edition (Paris, 1822, 4 vols.), which is enriched with so many additions that it may pass for an entirely new work. The last chapter of the part published during the author's lifetime ends with the revival of letters and the philosophy of the 15th century. The second part, carrying the work down to the close of the 18th century, was published posthumously by his son in 4 vols. (Paris, 1847). Twenty-three chapters of this were left complete by the author in manuscript; the remaining three were supplied from other sources, chiefly printed but unpublished memoirs.

His essay *Du perfectionnement moral et de l'éducation de soi-même* was crowned by the French Academy in 1825. The fundamental idea of this work is that human life is in reality only a great education, of which perfection is the aim.

Besides the works already mentioned, de Gérando left many others, of which we may indicate the following:—*Considérations sur diverses méthodes d'observation des peuples sauvages* (Paris, 1801); *Éloge de Dumarsais,—discours qui a remporté le prix proposé par la seconde classe de l'Institut National* (Paris, 1805); *Le Visiteur de pauvre* (Paris, 1820); *Instituts du droit administratif* (4 vols., Paris, 1830); *Cours normal des instituteurs primaires ou directions relatives à l'éducation physique, morale, et intellectuelle dans les écoles primaires* (Paris, 1832); *De l'éducation des sourds-muets* (2 vols., Paris, 1832); *De la bienfaisance publique* (4 vols., 1838). A detailed analysis of the *Histoire comparée des systèmes* will be found in the *Fragments philosophiques* of M. Cousin. In connexion with his psychological studies, it is interesting that in 1884 the French Anthropological Society reproduced his instructions for the

observation of primitive peoples, and modern students of the beginnings of speech in children and the cases of deaf-mutes have found useful matter in his works. See also J.P. Damiron, *Essai sur la philosophie en France au XIX^e^ siècle*.

GERANIACEAE, in botany, a small but very widely distributed natural order of Dicotyledons belonging to the subclass Polypetalae, containing about 360 species in 11 genera. It is represented in Britain by two genera, *Geranium* (crane's-bill) and *Erodium* (stork's-bill), to which belong nearly two-thirds of the total number of species. The plants are mostly herbs, rarely becoming shrubby, with generally simple glandular hairs on the stem and leaves. The opposite or alternate leaves have a pair of small stipules at the base of the stalk and a palminerved blade. The flowers, which are generally arranged in a cymose inflorescence, are hermaphrodite, hypogynous, and, except in *Pelargonium*, regular. The parts are arranged in fives. There are five free sepals, overlapping in the bud, and, alternating with these, five free petals. In *Pelargonium* the flower is zygomorphic with a spurred posterior sepal and the petals differing in size or shape. In *Geranium* the stamens are obdiplostemonous, *i.e.* an outer whorl of five opposite the petals alternates with an inner whorl of five opposite the sepals; at the base of each of the antisepalous stamens is a honey-gland. In *Erodium* the members of the outer whorl are reduced to scale-like structures (staminodes), and in *Pelargonium* from two to seven only are fertile. There is no satisfactory explanation of this break in the regular alternation of successive whorls; the outer whorl of stamens arises in course of development before the inner, so that there is no question of subsequent displacement. There are five, or sometimes fewer, carpels, which unite to form an ovary with as many chambers, in each of which are one or two, rarely more, pendulous anatropous ovules, attached to the central column in such a way that the micropyle points outwards and the raphe is turned towards the placenta. The long beak-like style divides at the top into a corresponding number of slender stigmas.



Meadow Crane's-bill, *Geranium pratense*. (After Curtis, *Flora Londinensis*.

1, Flower after removal of petals.
2, Fruit after splitting. 1 and 2 about natural size.
3, Floral diagram, the dots opposite the inner stamens represent honey-glands.

The larger-flowered species of *Geranium* are markedly protandrous, the outer stamens, inner stamens and stigmas becoming functional in succession. For instance, in meadow crane's-bill *G. pratense*, each whorl of stamens ripens in turn, becoming erect and shedding their pollen; as the anthers wither the filaments bend outwards, and when all the anthers have diverged the stigmas become mature and ready for pollination. By this arrangement self-pollination is prevented and cross-pollination ensured by the visits of bees which come for the honey secreted by the glands at the base of the inner stamens.

In species with smaller and less conspicuous flowers, such as *G. molle*, the flowers of which are only ⅓ to ½ in. in diameter, self-pollination is rendered possible, since the divisions of the stigma begin to separate before the outer stamens have shed all their pollen; the nearness of the stigmas to the dehiscing anthers favours self-pollination.

In the ripe fruit the carpels separate into five one-seeded portions (*cocci*), which break away from the central column, either rolling elastically outwards and upwards or becoming spirally twisted. In most species of *Geranium* the cocci split open on the inside and the seeds are shot out by the elastic uptwisting (fig. 1); in *Erodium* and *Pelargonium* each coccus remains closed, and the long twisted upper portion separates from the central column, forming an awn, the distribution of which is favoured by the presence of bristles or hairs. The embryo generally fills the seed, and the cotyledons are rolled or folded on each other.

Geranium is the most widely distributed genus; it has 160 species and is spread over all temperate regions with a few species in the tropics. Three British species—*G. sylvaticum*, *G. pratense* and *G. Robertianum* (herb-Robert)—reach the arctic zone, while *G. patagonicum* and *G. magellanicum* are found in the antarctic. *Erodium* contains 50 species (three are British), most of which are confined to the Mediterranean region and west Asia, though others occur in America, in South Africa and West Australia. *Pelargonium*, with 175 species, has its centre in South Africa; the well-known garden and greenhouse "geraniums" are species of *Pelargonium* (see GERANIUM).

GERANIUM, the name of a genus of plants, which is taken by botanists as the type of the natural order Geraniaceae. The name, as a scientific appellation, has a much more restricted application than when taken in its popular sense. Formerly the genus *Geranium* was almost conterminous with the order Geraniaceae. Then as now the geranium was very popular as a garden plant, and the species included in the original genus became widely known under that name, which has more or less clung to them ever since, in spite of scientific changes which have removed the large number of them to the genus *Pelargonium*. This result has been probably brought about in some degree by an error of the nurserymen, who seem in many cases to have acted on the conclusion that the group commonly known as *Scarlet Geraniums* were really geraniums and not pelargoniums, and were in consequence inserted under the former name in their trade catalogues. In fact it may be said that, from a popular point of view, the pelargoniums of the botanist are still better known as geraniums than are the geraniums themselves, but the term "zonal Pelargonium" is gradually making its way amongst the masses.

The species of *Geranium* consist mostly of herbs, of annual or perennial duration, dispersed throughout the temperate regions of the world. They number about 160, and bear a considerable family resemblance. The leaves are for the most part palmately-lobed, and the flowers are regular, consisting of five sepals, five imbricating petals, alternating with five glandules at their base, ten stamens and a beaked ovary. Eleven species are natives of the British Isles and are popularly known as crane's-bill. *G. Robertianum* is herb-Robert, a common plant in hedgebanks. *G. sanguineum*, with flowers a deep rose colour, is often grown in borders, as are also the double-flowered varieties of *G. pratense*. Many others of exotic origin form handsome border plants in our gardens of hardy perennials; amongst these *G. armenum*, *G. Endressi*, *G. ibericum* and its variety *platypetalum* are conspicuous.

From these regular-flowered herbs, with which they had been mixed up by the earlier botanists, the French botanist L'Heritier in 1787 separated those plants which have since borne the name of *Pelargonium*, and which, though agreeing with them in certain points of structure, differ in others which are admitted to be of generic value. One obvious distinction of *Pelargonium* is that the flowers are irregular, the two petals which stand uppermost being different—larger, smaller or differently marked—from the other three, which latter are occasionally wanting. This difference of irregularity the modern florist has done very much to

annul, for the increased size given to the flowers by high breeding has usually been accompanied by the enlargement of the smaller petals, so that a very near approach to regularity has been in some cases attained. Another well-marked difference, however, remains in *Pelargonium*: the back or dorsal sepal has a hollow spur, which spur is adnate, *i.e.* joined for its whole length with the flower-stalk; while in *Geranium* there is no spur. This peculiarity is best seen by cutting clean through the flower-stalk just behind the flower, when in *Pelargonium* there will be seen the hollow tube of the spur, which in the case of *Geranium* will not be found, but the stalk will appear as a solid mass. There are other characters which support those already pointed out, such as the absence of the glandules, and the declination of the stamens; but the features already described offer the most ready and obvious distinctions.

To recapitulate, the geraniums properly so-called are regular-flowered herbs with the flower-stalks solid, while many geraniums falsely so-called in popular language are really pelargoniums, and may be distinguished by their irregular flowers and hollow flower-stalks. In a great majority of cases too, the pelargoniums so commonly met with in greenhouses and summer parterres are of shrubby or sub-shrubby habit.

The various races of pelargoniums have sprung from the intermixture of some of the species obtained from the Cape. The older show-flowered varieties have been gradually acquired through a long series of years. The fancy varieties, as well as the French spotted varieties and the market type, have been evolved from them. The zonal or bedding race, on the other hand, has been more recently perfected; they are supposed to have arisen from hybrids between *Pelargonium inquinans* and *P. zonale*. In all the sections the varieties are of a highly ornamental character, but for general cultivation the market type is preferable for indoor purposes, while the zonals are effective either in the greenhouse or flower garden. Some of the Cape species are still in cultivation—the leaves of many of them being beautifully subdivided, almost fern-like in character, and some of them are deliciously scented; *P. quercifolium* is the oak-leaf geranium. The ivy-leaf geranium, derived from *P. peltatum*, has given rise to an important class of both double- and single-flowered forms adapted especially for pot culture, hanging baskets, window boxes and the greenhouse. Of late years the ivy-leaf “geraniums” have been crossed with the “zonals,” and a new race is being gradually evolved from these two distinct groups.

The best soil for pelargoniums is a mellow fibrous loam with good well-rotted stable manure or leaf-mould in about the proportion of one-fifth; when used it should not be sifted, but pulled to pieces by the hand, and as much sand should be added as will allow the water to pass freely through it. The large-flowered and fancy kinds cannot bear so much water as most soft-wooded plants, and the latter should have a rather lighter soil.

All the pelargoniums are readily increased by cuttings made from the shoots when the plants are headed down after flowering, or in the spring, when they will root freely in a temperature of 65° to 70°. They must not be kept too close, and must be very moderately watered. When rooted they may be moved into well-drained 3-in. pots, and when from 6 to 8 in. high, should have the points pinched out in order to induce them to push out several shoots nearer the base. These shoots are, when long enough, to be trained in a horizontal direction; and when they have made three joints they should have the points again pinched out. These early-struck plants will be ready for shifting into 6-in. pots by the autumn, and should still be trained outwards. The show varieties after flowering should be set out of doors in a sunny spot to ripen their wood, and should only get water enough to keep them from flagging. In the course of two or three weeks they will be ready to cut back within two joints of where these were last stopped, when they should be placed in a frame or pit, and kept close and dry until they have broken. When they have pushed an inch or so, turn them out of their pots, shake off the old soil, trim the straggling roots, and repot them firmly in smaller pots if practicable; keep them near the light, and as the shoots grow continue to train them outwardly. They require to be kept in a light house, and to be set well up to the glass; the night temperature should range about 45°; and air should be given on all mild days, but no cold currents allowed, nor more water than is necessary to keep the soil from getting parched. The young shoots should be topped about the end of October, and when they have grown an inch or two beyond this, they may be shifted into 7-in. pots for flowering. The shoots must be kept tied out so as to be fully exposed to the light. If required to flower early they should not be stopped again; if not until June they may be stopped in February.

The zonal varieties, which are almost continuous bloomers, are of much value as decorative subjects; they seldom require much pruning after the first stopping. For winter flowering, young plants should be raised from cuttings about March, and grown on during the summer, but should not be allowed to flower. When blossoms are required, they should be placed close up to the glass in a light house with a temperature of 65°, only just as much water being given as will keep them growing. For bedding purposes the zonal varieties are best struck towards

the middle of August in the open air, taken up and potted or planted in boxes as soon as struck, and preserved in frames or in the greenhouse during winter.

The fancy varieties root best early in spring from the half-ripened shoots; they are slower growers, and rather more delicate in constitution than the zonal varieties, and very impatient of excess of water at the root.

GERARD (d. 1108), archbishop of York under Henry I., began his career as a chancery clerk in the service of William Rufus. He was one of the two royal envoys who, in 1095, persuaded Urban II. to send a legate and Anselm's pallium to England. Although the legate disappointed the king's expectations, Gerard was rewarded for his services with the see of Hereford (1096). On the death of Rufus he at once declared for Henry I., by whom he was nominated to the see of York. He made difficulties when required to give Anselm the usual profession of obedience; and it was perhaps to assert the importance of his see that he took the king's side on the question of investitures. He pleaded Henry's cause at Rome with great ability, and claimed that he had obtained a promise, on the pope's part, to condone the existing practice of lay investiture. But this statement was contradicted by Paschal, and Gerard incurred the suspicion of perjury. About 1103 he wrote or inspired a series of tracts which defended the king's prerogative and attacked the oecumenical pretensions of the papacy with great freedom of language. He changed sides in 1105, becoming a stanch friend and supporter of Anselm. Gerard was a man of considerable learning and ability; but the chroniclers accuse him of being lax in his morals, an astrologer and a worshipper of the devil.

See the *Tractatus Eboracenses* edited by H. Bochmer in *Libelli de lite Sacerdotii et Imperii*, vol. iii. (in the *Monumenta hist. Germaniae*, quarto series), and the same author's *Kirche und Staat in England und in der Normandie* (Leipzig, 1899).

(H. W. C. D.)

GERARD (*c.* 1040-1120), variously surnamed Tum, Tunc, Tenque or Thom, founder of the order of the knights of St John of Jerusalem (*q.v.*), was born at Amalfi about the year 1040. According to other accounts Martigues in Provence was his birthplace, while one authority even names the Château d'Avesnes in Hainaut. Either as a soldier or a merchant, he found his way to Jerusalem, where a hospice had for some time existed for the convenience of those who wished to visit the holy places. Of this institution Gerard became guardian or provost at a date not later than 1100; and here he organized that religious order of St John which received papal recognition from Paschal II. in 1113, by a bull which was renewed and confirmed by Calixtus II. shortly before the death of Gerard in 1120.

GERARD OF CREMONA (*c.* 1114-1187), the medieval translator of Ptolemy's Astronomy, was born at Cremona, Lombardy, in or about 1114. Dissatisfied with the meagre philosophies of his Italian teachers, he went to Toledo to study in Spanish Moslem schools, then so famous as depositories and interpreters of ancient wisdom; and, having thus acquired a knowledge of the Arabic language, he appears to have devoted the remainder of his life to the business of making Latin translations from its literature. The date of his return to his native town is uncertain, but he is known to have died there in 1187. His most celebrated work is the Latin version by which alone Ptolemy's *Almagest* was known to Europe until the discovery of the original Μεγάλη Σύνταξις. In addition to this, he translated various other treatises, to the number, it is said, of sixty-six; among these were the *Tables* of "Arzakhel," or Al Zarkala of Toledo, Al Farabi *On the Sciences* (*De scientiis*), Euclid's *Geometry*, Al Farghani's *Elements of Astronomy*, and treatises on algebra, arithmetic and astrology. In the last-named latitudes are reckoned from Cremona and Toledo. Some of the works, however, with which he has been credited (including the *Theoria* or *Theorica planetarum*, and the versions of Avicenna's *Canon*

of Medicine—the basis of the numerous subsequent Latin editions of that well-known work—and of the *Almansorius* of Abu Bakr Razi) are probably due to a later Gerard, of the 13th century, also called Cremonensis but more precisely de Sabloneta (Sabbionetta). This writer undertook the task of interpreting to the Latin world some of the best work of Arabic physicians, and his translation of Avicenna is said to have been made by order of the emperor Frederic II.

See Pipini, "Cronica," in Muratori, *Script. rer. Ital.* vol. ix.; Nicol. Antonio, *Bibliotheca Hispana vetus*, vol. ii.; Tiraboschi, *Storia della letteratura Italiana*, vols. iii. (333) and iv.; Arisi, *Cremona literata*; Jourdain, Recherches sur ... *l'origine des traductions latines d'Aristote*; Chasles, *Aperçu historique des méthodes en géométrie*, and in *Comptes rendus de l'Académie des Sciences*, vol. xiii. p. 506; J.T. Reinaud, *Géographie d'Aboulféda*, introduction, vol. i. pp. ccxlvi.-ccxlviii.; Boncompagni, *Della vita e delle opere di Gherardo Cremonese e di Gherardo da Sabbionetta* (Rome, 1851). Much of the work of both the Gerards remains in manuscript, as in Paris, National Library, MSS. Lat. 7400, 7421; MSS. Suppl. Lat. 49; Rome, Vatican library, 4083, and Ottobon, 1826; Oxford, Bodleian library, Digby, 47, 61. The Vatican MS. 2392 is stated to contain a eulogy of "Gerard of Cremona" and a list of "his" translations, apparently confusing the two scholars. The former's most valuable work was in astronomy; the latter's in medicine.

(C. R. B.)

GÉRARD, ÉTIENNE MAURICE, Count (1773-1852), French general, was born at Damvilliers (Meuse), on the 4th of April 1773. He joined a battalion of volunteers in 1791, and served in the campaigns of 1792-1793 under Generals Dumouriez and Jourdan. In 1795 he accompanied Bernadotte as aide-de-camp. In 1799 he was promoted *chef d'escadron*, and in 1800 colonel. He distinguished himself at the battles of Austerlitz and Jena, and was made general of brigade in November 1806, and for his conduct in the battle of Wagram he was created a baron. In the Spanish campaign of 1810 and 1811 he gained special distinction at the battle of Fuentes d'Onor; and in the expedition to Russia he was present at Smolensk and Valutina, and displayed such bravery and ability in the battle of Borodino that he was made general of division. He won further distinction in the disastrous retreat from Moscow. In the campaign of 1813, in command of a division, he took part in the battles of Lützen and Bautzen and the operations of Marshal Macdonald, and at the battle of Leipzig (in which he commanded the XI. corps) he was dangerously wounded. After the battle of Bautzen he was created by Napoleon a count of the empire. In the campaign of France of 1814, and especially at La Rothière and Montereau, he won still greater distinction. After the first restoration he was named by Louis XVIII. grand cross of the Legion of Honour and chevalier of St Louis. In the Hundred Days Napoleon made Gérard a peer of France and placed him in command of the IV. corps of the Army of the North. In this capacity Gérard took a brilliant part in the battle of Ligny (see Waterloo Campaign), and on the morning of the 18th of June he was foremost in advising Marshal Grouchy to march to the sound of the guns. Gérard retired to Brussels after the fall of Napoleon, and did not return to France till 1817. He sat as a member of the chamber of deputies in 1822-1824, and was re-elected in 1827. He took part in the revolution of 1830, after which he was appointed minister of war and named a marshal of France. On account of his health he resigned the office of war minister in the October following, but in 1831 he took the command of the northern army, and was successful in thirteen days in driving the army of Holland out of Belgium. In 1832 he commanded the besieging army in the famous scientific siege of the citadel of Antwerp. He was again chosen war minister in July 1834, but resigned in the October following. In 1836 he was named grand chancellor of the Legion of Honour in succession to Marshal Mortier, and in 1838 commander of the National Guards of the Seine, an office which he held till 1842. He became a senator under the empire in 1852, and died on the 17th of April in the same year.

GÉRARD, FRANÇOIS, Baron (1770-1837), French painter, was born on the 4th of May 1770, at Rome, where his father occupied a post in the house of the French ambassador. At the age of twelve Gérard obtained admission into the Pension du Roi at Paris. From the Pension he passed to the studio of Pajou (sculptor), which he left at the end of two years for that of the

painter Brenet, whom he quitted almost immediately to place himself under David. In 1789 he competed for the Prix de Rome, which was carried off by his comrade Girodet. In the following year (1790) he again presented himself, but the death of his father prevented the completion of his work, and obliged him to accompany his mother to Rome. In 1791 he returned to Paris; but his poverty was so great that he was forced to forgo his studies in favour of employment which should bring in immediate profit. David at once availed himself of his help, and one of that master's most celebrated pictures—Le Pelletier de St Fargeau—may owe much to the hand of Gérard. This painting was executed early in 1793, the year in which Gérard, at the request of David, was named a member of the revolutionary tribunal, from the fatal decisions of which he, however, invariably absented himself. In 1794 he obtained the first prize in a competition, the subject of which was "The Tenth of August," and, further stimulated by the successes of his rival and friend Girodet in the Salons of 1793 and 1794, Gérard (nobly aided by Isabey the miniaturist) produced in 1795 his famous "Bélisaire." In 1796 a portrait of his generous friend (in the Louvre) obtained undisputed success, and the money received from Isabey for these two works enabled Gérard to execute in 1797 his "Psyché et l'Amour." At last, in 1799, his portrait of Madame Bonaparte established his position as one of the first portrait-painters of the day. In 1808 as many as eight, in 1810 no less than fourteen portraits by him, were exhibited at the Salon, and these figures afford only an indication of the enormous numbers which he executed yearly; all the leading figures of the empire and of the restoration, all the most celebrated men and women of Europe, sat to Gérard. This extraordinary vogue was due partly to the charm of his manner and conversation, for his *salon* was as much frequented as his studio; Madame de Staël, Canning, Talleyrand, the duke of Wellington, have all borne witness to the attraction of his society. Rich and famous, Gérard was stung by remorse for earlier ambitions abandoned; at intervals he had indeed striven to prove his strength with Girodet and other rivals, and his "Bataille d'Austerlitz" (1810) showed a breadth of invention and style which are even more conspicuous in "L'Entrée d'Henri IV" (Versailles)—the work with which in 1817 he did homage to the Bourbons. After this date Gérard declined, watching with impotent grief the progress of the Romantic school. Loaded with honours—baron of the empire, member of the Institute, officer of the legion of honour, first painter to the king—he worked on sad and discouraged; the revolution of 1830 added to his disquiet; and on the 11th of January 1837, after three days of fever, he died. By his portraits Gérard is best remembered; the colour of his paintings has suffered, but his drawings show in uninjured delicacy the purity of his line; and those of women are specially remarkable for a virginal simplicity and frankness of expression.

M. Ch. Lenormant published in 1846 *Essai de biographie et de critique sur François Gérard*, a second edition of which appeared in 1847; and M. Delécluze devoted several pages to the same subject in his work *Louis David, son école et son temps*.

GÉRARD, JEAN IGNACE ISIDORE (1803-1847), French caricaturist, generally known by the pseudonym of Grandville—the professional name of his grandparents, who were actors—was born at Nancy on the 13th of September 1803. He received his first instruction in drawing from his father, a miniature painter, and at the age of twenty-one came to Paris, where he soon afterwards published a collection of lithographs entitled *Les Tribulations de la petite propriété*. He followed this by Les Plaisirs de toutâge and *La Sibylle des salons*; but the work which first established his fame was *Métamorphoses du jour*, published in 1828, a series of seventy scenes in which individuals with the bodies of men and faces of animals are made to play a human comedy. These drawings are remarkable for the extraordinary skill with which human characteristics are represented in animal features. The success of this work led to his being engaged as artistic contributor to various periodicals, such as *La Silhouette*, *L'Artiste*, *La Caricature*, *Le Charivari*; and his political caricatures, which were characterized by marvellous fertility of satirical humour, soon came to enjoy a general popularity. Besides supplying illustrations for various standard works, such as the songs of Béranger, the fables of La Fontaine, *Don Quixote*, *Gulliver's Travels*, *Robinson Crusoe*, he also continued the issue of various lithographic collections, among which may be mentioned *La Vie privée et publique des animaux*, *Les Cent Proverbes*, *L'Autre Monde* and *Les Fleurs animées*. Though the designs of Gérard are occasionally unnatural and absurd, they usually display keen analysis of character and marvellous inventive ingenuity, and his humour is always tempered and refined by delicacy of sentiment and a vein of sober thoughtfulness. He died of mental disease on the 17th of March 1847.

A short notice of Gérard, under the name of Grandville, is contained in Théophile Gautier's *Portraits contemporains*. See also Charles Blanc, *Grandville* (Paris, 1855).

GERARD, JOHN (1545-1612), English herbalist and surgeon, was born towards the end of 1545 at Nantwich in Cheshire. He was educated at Wisterson, or Willaston, 2 m. from Nantwich, and eventually, after spending some time in travelling, took up his abode in London, where he exercised his profession. For more than twenty years he also acted as superintendent of the gardens in London and at Theobalds, in Hertfordshire, of William Cecil, Lord Burghley. In 1596 he published a catalogue of plants cultivated in his own garden in Holborn, London, 1039 in number, inclusive of varieties of the same species. Their English as well as their Latin names are given in a revised edition of the catalogue issued in 1599. In 1597 appeared Gerard's well-known *Herball*, described by him in its preface as "the first fruits of these mine own labours," but more truly an adaptation of the *Stirpium historiae pemptades* of Rembert Dodoens (1518-1585), published in 1583, or rather of a translation of the whole or part of the same by Dr Priest, with M. Lobel's arrangement. Of the numerous illustrations of the *Herball* sixteen appear to be original, the remainder are mostly impressions from the wood blocks employed by Jacob Theodorus Tabernaemontanus in his *Icones stirpium*, published at Frankfort in 1590. A second edition of the *Herball*, with considerable improvements and additions, was brought out by Thomas Johnson in 1633, and reprinted in 1636. Gerard was elected a member of the court of assistants of the barber-surgeons in 1595, by which company he was appointed an examiner in 1598, junior warden in 1605, and master in 1608. He died in February 1612, and was buried at St Andrews, Holborn.

See Johnson's preface to his edition of the *Herball*; and *A Catalogue of Plants cultivated in the Garden of John Gerard in the years 1596-1599, edited with Notes, References to Gerard's Herball, the Addition of modern Names, and a Life of the Author, by Benjamin Daydon Jackson, F.L.S.*, privately printed (London, 1876, 4to).

GÉRARDMER, a town of north-eastern France, in the department of Vosges, 33 m. E.S.E. of Epinal by rail. Pop. (1906) of the town, 3993; of the commune, 10,041. Gérardmer is beautifully situated at a height of 2200 ft. at the eastern end of the small Lake of Gérardmer (285 acres in extent) among forest-clad mountains. It is the chief summer-resort of the French Vosges and is a centre for excursions, among which may be mentioned those to the Höhneck (4481 ft.), the second highest summit in the Vosges, the Schlucht, the mountain pass from France to Germany, and, nearer the town, the picturesque defile of Granges, watered by the Vologne, which at one point forms the cascade known as the Saut des Cuves. The town itself, in which the chief object of interest is the huge lime-tree in the market-place, carries on cloth-weaving, bleaching, wood-sawing and the manufacture of wooden goods; there is trade in the cheeses (*géromés*) manufactured in the neighbourhood. Gérardmer is said to owe its name to Gerard of Alsace, 1st duke of Lorraine, who in the 11th century built a tower on the bank of the lake or *mer*, near which, in 1285, a new town was founded.

GERASA (mod. *Gerash* or *Jerash*), a city of Palestine, and a member of the league known as the Decapolis (*q.v.*), situated amid the mountains of Gilead, about 1757 ft. above the sea, 20 m. from the Jordan and 21 m. N. of Philadelphia. Of its origin nothing is known; it has been suggested that it represents the biblical Ramoth Gilead. From Josephus we learn that it was captured by Alexander Jannaeus (*c.* 83 B.C.), rebuilt by the Romans (*c.* A.D. 65), burned by the Jews in revenge for the massacre at Caesarea, and again plundered and depopulated by Annius, the general of Vespasian; but, in spite of these disasters, it was still in the 2nd and 3rd centuries of the Christian era one of the wealthiest and most flourishing cities of Palestine. It was a centre of Greek civilization, devoted especially to the worship of Artemis, and producing famous teachers, of whom Stephen the Byzantine mentions Ariston, Kerykos and Plato. As late as 1121 the soldiers of Baldwin II. found it defended by a castle built by a king of Damascus; but at the beginning of the following century the Arabian geographer Yaqut speaks of it as deserted and overthrown. The ruins of Jerash, discovered about 1806, and since then

frequently visited and described, still attest the splendour of the Roman city. They are distributed along both banks of the Kerwan, a brook which flows south through the Wadi-ed-Dēr to join the Zerka or Jabbok; but all the principal buildings are situated on the level ground to the right of the stream. The town walls, which can still be traced and indeed are partly standing, had a circuit of not more than 2 m., and the main street was less than half a mile in length; but remains of buildings on the road for fully a mile beyond the south gate, show that the town had outgrown the limit of its fortifications. The most striking feature of the ruins is the profusion of columns, no fewer than 230 being even now in position; the main street is a continuous colonnade, a large part of which is still entire, and it terminates to the south in a forum of similar formation. Among the public buildings still recognizable are a theatre capable of accommodating 6000 spectators, a naumachia (circus for naval combats) and several temples, of which the largest was probably the grandest structure in the city, possessing a portico of Corinthian pillars 38 ft. high. The desolation of the city is probably due to earthquake; and the absence of Moslem erections or restorations seems to show that the disaster took place before the Mahommedan period.

The town is now occupied by a colony of Circassians, whose houses have been built with materials from the earlier buildings, and there has been much destruction of the interesting ruins. “The country of the Gerasenes” (Matt. viii. 28 and parallels; other readings, Gadarenes, Gergesenes) must be looked for in another quarter—on the E. coast of the Sea of Galilee, probably in the neighbourhood of the modern Khersa (C.W. Wilson in *Recovery of Jerusalem*, p. 369).

(R. A. S. M.)

GÉRAULT-RICHARD, ALFRED LÉON (1860-), French journalist and politician, was born at Bonnétable in the department of Sarthe, of a peasant family. He began life as a working upholsterer, first at Mans, then at Paris (1880), where his peasant and socialist songs soon won him fame in the Montmartre quarter. Lissagaray, the communist, offered him a position on *La Bataille*, and he became a regular contributor to the advanced journals, especially to *La Petite République*, of which he became editor-in-chief in 1897. In 1893 he founded *Le Chambard*, and was imprisoned for a year (1894) on account of a personal attack upon the president, Casimir-Périer. In January 1895 he was elected to the chamber as a Socialist for the thirteenth arrondissement of Paris. He was defeated at the elections of 1898 at Paris, but was re-elected in 1902 and in 1906 by the colony of Guadeloupe.

GERBER, ERNST LUDWIG (1746-1819), German musician, author of a famous dictionary of musicians, was born at Sondershausen in the principality of Schwarzburg-Sondershausen on the 29th of September 1746. His father, Henry Nicolas Gerber (1702-1775), a pupil of J.S. Bach, was an organist and composer of some distinction, and under his direction Ernst Ludwig at an early age had made great progress in his musical studies. In 1765 he went to Leipzig to study law, but the claims of music, which had gained additional strength from his acquaintanceship with J.A. Hiller, soon came to occupy almost his sole attention. On his return to Sondershausen he was appointed music teacher to the children of the prince, and in 1775 he succeeded his father as court organist. Afterwards he devoted much of his time to the study of the literature and history of music, and with this view he made himself master of several modern languages. His *Historisch-biographisches Lexikon der Tonkünstler* appeared in 1790 and 1792 in two volumes; and the first volume of what was virtually an improved and corrected edition of this work was published in 1810 under the title *Neues historisch-biographisches Lexikon der Tonkünstler*, followed by other three volumes in 1812, 1813 and 1814. Gerber also contributed a number of papers to musical periodicals, and published several minor musical compositions. He died at Sondershausen on the 30th of June 1819.

GERBERON, GABRIEL (1628-1711), French Jansenist monk, was born on the 12th of August 1628 at St Calais, in the department of Sarthe. At the age of twenty he took the vows of the Benedictine order at the abbey of Ste Melaine, Rennes, and afterwards taught rhetoric and philosophy in several monasteries. His open advocacy of Jansenist opinions, however, caused his superiors to relegate him to the most obscure houses of the order, and finally to keep him under surveillance at the abbey of St Germain-des-Prés at Paris. Here he wrote a defence of the doctrine of the Real Presence against the Calvinists in the form of an apology for Rupert, abbot of Deutz (*Apologia pro Ruperto abbate Tuitensi*, Paris, 1669). In 1676 he published at Brussels, under the name of "Sieur Flore de Ste Foi" his *Miroir de la piété chrétienne*, an enlarged edition of which appeared at Liége in the following year. This was condemned by certain archbishops and theologians as the repetition of the five condemned propositions of Jansen, and Gerberon defended it, under the name of "Abbé Valentin" in *Le Miroir sans tache* (Paris, 1680). He had by this time aroused against him the full fury of the Jesuits, and at their instigation a royal provost was sent to Corbie to arrest him. He had, however, just time to escape, and fled to the Low Countries, where he lived in various towns. He was invited by the Jansenist clergy to Holland, where he wrote another controversial work against the Protestants: *Défense de l'Église Romain contre la calomnie des Protestants* (Cologne, 1688-1691). This produced unpleasantness with the Reformed clergy, and feeling himself no longer safe he returned to Brussels. In 1700 he published his history of Jansenism (*Histoire générale du Jansénisme*), a dry work, by which, however, he is best remembered. He adhered firmly to the Augustinian doctrine of Predestination, and on the 30th of May 1703 he was arrested at Brussels at the instance of the archbishop of Malines, and ordered to subscribe the condemnation of the five sentences of Jansen. On his refusal, he was handed over to his superiors and imprisoned in the citadel of Amiens and afterwards at Vincennes. Every sort of pressure was brought to bear upon him to make his submission, and at last, broken in health and spirit, he consented to sign a formula which the cardinal de Noailles claimed as a recantation. Upon this he was released in 1710. The first use he made of his freedom was to write a work (which, however, his friends prudently prevented him from publishing), *Le Vaine Triomphe du cardinal de Noailles*, containing a virtual withdrawal of the compulsory recantation. He died at the abbey of St Denis on the 29th of March 1711.

GERBERT, MARTIN (1720-1793), German theologian, historian and writer on music, belonged to the noble family of Gerbert von Hornau, and was born at Horb on the Neckar, Württemberg, on the 12th (or 11th or 13th) of August 1720. He was educated at Freiburg in the Breisgau, at Klingenau in Switzerland and at the Benedictine abbey of St Blasien in the Black Forest, where in 1737 he took the vows. In 1744 he was ordained priest, and immediately afterwards appointed professor, first of philosophy and later of theology. Between 1754 and 1764 he published a series of theological treatises, their main tendency being to modify the rigid scholastic system by an appeal to the Fathers, notably Augustine; from 1759 to 1762 he travelled in Germany, Italy and France, mainly with a view to examining the collections of documents in the various monastic libraries. In 1764 he was elected prince-abbot of St Blasien, and proved himself a model ruler both as abbot and prince. His examination of archives during his travels had awakened in him a taste for historical research, and under his rule St Blasien became a notable centre of the methodical study of history; it was here that Marquard Herrgott wrote his *Monumenta domus Austriacae*, of which the first two volumes were edited, for the second edition, by Gerbert, who also published a *Codex epistolaris Rudolphi I., Romani regis* (1772) and *De Rudolpho Suevico comite de Rhinfelden, duce et rege, deque ejus familia* (1785). It was, however, in sacramental theology, liturgiology, and notably ecclesiastical music that Gerbert was mainly interested. In 1774 he published two volumes *De cantu et musica sacra*; in 1777, *Monumenta veteris liturgiae Alemannicae*; and in 1784, in three volumes, *Scriptores ecclesiastici de musica sacra*, a collection of the principal writers on church music from the 3rd century till the invention of printing. The materials for this work he had gathered during his travels, and although it contains many textual errors, its publication has been of great importance for the history of music, by preserving writings which might either have perished or remained unknown. His interest in music led to his acquaintance with the composer Gluck, who became his intimate friend.

As a prince of the Empire Gerbert was devoted to the interests of the house of Austria; as a Benedictine abbot he was opposed to Joseph II.'s church policy. In the Febronian controversy (see Febronianism) he had early taken a mediating attitude, and it was largely due to his influence that Bishop Hontheim had been induced to retract his extreme views.

In 1768 the abbey of St Blasien, with the library and church, was burnt to the ground, and the splendid new church which rose on the ruins of the old (1783) remained until its destruction by fire in 1874, at once a monument of Gerbert's taste in architecture and of his Habsburg sympathies. It was at his request that it was made the mausoleum of all the Austrian princes buried outside Austria, whose remains were solemnly transferred to its vaults. In connexion with its consecration he published his *Historia Nigrae Silvae, ordinis S. Benedicti coloniae* (3 vols., St Blasien, 1783).

Gerbert, who was beloved and respected by Catholics and Protestants alike, died on the 3rd of May 1793.

See Joseph Bader, *Das ehemalige Kloster St Blasien und seine Gelehrtenakademie* (Freiburg-im-Breisgau, 1874), which contains a chronological list of Gerbert's works.

GERBIL, or Gerbille, the name of a group of small, elegant, large-eyed, jumping rodents typified by the North African *Gerbillus aegyptiacus* (or *gerbillus*), and forming a special subfamily, *Gerbillinae*, of the rat tribe or *Muridae*. They are found over the desert districts of both Asia and Africa, and are classed in the genera *Gerbillus* (or *Tatera*), *Pachyuromys*, *Meriones*, *Psammomys* and *Rhombomys*, with further divisions into subgenera. They have elongated hind-limbs and long hairy tails; and progress by leaps, in the same manner as jerboas, from which they differ in having five hind-toes. The cheek-teeth have transverse plates of enamel on the crowns; the number of such plates diminishing from three in the first tooth to one or one and a half in the third. The upper incisor teeth are generally marked by grooves. Gerbils are inhabitants of open sandy plains, where they dwell in burrows furnished with numerous exits, and containing large grass-lined chambers. The Indian *G. indicus* produces at least a dozen young at a birth. All are more or less completely nocturnal.

GERENUK, the Somali name of a long-necked aberrant gazelle, commonly known as Waller's gazelle (*Lithocranius walleri*), and ranging from Somaliland to Kilimanjaro. The long neck and limbs, coupled with peculiarities in the structure of the skull, entitle the gerenuk, which is a large species, to represent a genus. The horns of the bucks are heavy, and have a peculiar forward curvature at the tips; the colour of the coat is red-fawn, with a broad brown band down the back. Gerenuk are browsing ruminants, and, in Somaliland, are found in small family-parties, and feed more by browsing on the branches and leaves of trees and shrubs than by grazing. Frequently they raise themselves by standing on their hind-legs with the fore-feet resting against the trunk of the tree on which they are feeding. Their usual pace is an awkward trot, not unlike that of a camel; and they seldom break into a gallop. The Somali form has been separated as *L. sclateri*, but is not more than a local race. (See Antelope.)

GERGOVIA (mod. *Gergovie*), in ancient geography, the chief town of the Arverni, situated on a hill in the Auvergne, about 8 m. from the Puy de Dôme, France. Julius Caesar attacked it in 52 B.C., but was beaten off; some walls and earthworks seem still to survive from this period. Later, when Gaul had been subdued, the place was dismantled and its Gaulish inhabitants resettled 4 m. away in the plain at the new Roman city of Augustonemĕtum (mod. *Clermont-Ferrand*).

GERHARD, FRIEDRICH WILHELM EDUARD (1795-1867), German archaeologist, was

born at Posen on the 29th of November 1795, and was educated at Breslau and Berlin. The reputation he acquired by his *Lectiones Apollonianae* (1816) led soon afterwards to his being appointed professor at the gymnasium of Posen. On resigning that office in 1819, on account of weakness of the eyes, he went in 1822 to Rome, where he remained for fifteen years. He contributed to Platner's *Beschreibung der Stadt Rom*, then under the direction of Bunsen, and was one of the principal originators and during his residence in Italy director of the *Instituto di corrispondenza archeologica*, founded at Rome in 1828. Returning to Germany in 1837 he was appointed archaeologist at the Royal Museum of Berlin, and in 1844 was chosen a member of the Academy of Sciences, and a professor in the university. He died at Berlin on the 12th of May 1867.

Besides a large number of archaeological papers in periodicals, in the *Annali* of the Institute of Rome, and in the Transactions of the Berlin Academy, and several illustrated catalogues of Greek, Roman and other antiquities in the Berlin, Naples and Vatican Museums, Gerhard was the author of the following works: *Antike Bildwerke* (Stuttgart, 1827-1844); *Auserlesene griech. Vasenbilder* (1839-1858); *Etruskische Spiegel* (1839-1865); *Hyperboreisch-röm. Studien* (vol. i., 1833; vol. ii., 1852); *Prodromus mytholog. Kunsterklärung* (Stuttgart and Tübingen, 1828); and *Griech. Mythologie* (1854-1855). His *Gesammelte akademische Abhandlungen und kleine Schriften* were published posthumously in 2 vols., Berlin, 1867.

GERHARD, JOHANN (1582-1637), Lutheran divine, was born in Quedlinburg on the 17th of October 1582. In his fifteenth year, during a dangerous illness, he came under the personal influence of Johann Arndt, author of *Das wahre Christenthum*, and resolved to study for the church. He entered the university of Wittenberg in 1599, and first studied philosophy. He also attended lectures in theology, but, a relative having persuaded him to change his subject, he studied medicine for two years. In 1603, however, he resumed his theological reading at Jena, and in the following year received a new impulse from J.W. Winckelmann (1551-1626) and Balthasar Mentzer (1565-1627) at Marburg. Having graduated and begun to give lectures at Jena in 1605, he in 1606 accepted the invitation of John Casimir, duke of Coburg, to the superintendency of Heldburg and mastership of the gymnasium; soon afterwards he became general superintendent of the duchy, in which capacity he was engaged in the practical work of ecclesiastical organization until 1616, when he became theological professor at Jena, where the remainder of his life was spent. Here, with Johann Major and Johann Himmel, he formed the "Trias Johannea." Though still comparatively young, Gerhard had already come to be regarded as the greatest living theologian of Protestant Germany; in the numerous "disputations" of the period he was always protagonist, while on all public and domestic questions touching on religion or morals his advice was widely sought. It is recorded that during the course of his lifetime he had received repeated calls to almost every university in Germany (*e.g.* Giessen, Altdorf, Helmstädt, Jena, Wittenberg), as well as to Upsala in Sweden. He died in Jena on the 20th of August 1637.

His writings are numerous, alike in exegetical, polemical, dogmatic and practical theology. To the first category belong the *Commentarius in harmoniam historiae evangelicae de passione Christi* (1617), the *Comment, super priorem D. Petri epistolam* (1641), and also his commentaries on Genesis (1637) and on Deuteronomy (1658). Of a controversial character are the *Confessio Catholica* (1633-1637), an extensive work which seeks to prove the evangelical and catholic character of the doctrine of the Augsburg Confession from the writings of approved Roman Catholic authors; and the *Loci communes theologici* (1610-1622), his principal contribution to science, in which Lutheranism is expounded "nervose, solide, et copiose," in fact with a fulness of learning, a force of logic and a minuteness of detail that had never before been approached. *The Meditationes sacrae* (1606), a work expressly devoted to the uses of Christian edification, has been frequently reprinted in Latin and has been translated into most of the European languages, including Greek. The English translation by R. Winterton (1631) has passed through at least nineteen editions. There is also an edition by W. Papillon in English blank verse (1801). His life, *Vita Joh. Gerhardi*, was published by E.R. Fischer in 1723, and by C.J. Böttcher, *Das Leben Dr Johann Gerhards*, in 1858. See also W. Gass, *Geschichte der protestantischen Dogmatik* (1854-1867), and the article in the *Allgemeine deutsche Biographie*.

GERHARDT, CHARLES FRÉDÉRIC (1816-1856), French chemist, was born at Strassburg on the 21st of August 1816. After attending the gymnasium at Strassburg and the polytechnic at Karlsruhe, he was sent to the school of commerce at Leipzig, where he studied chemistry under Otto Erdmann. Returning home in 1834 he entered his father's white lead factory, but soon found that business was not to his liking, and after a sharp disagreement with his father enlisted in a cavalry regiment. In a few months military life became equally distasteful, and he purchased his discharge with the assistance of Liebig, with whom, after a short interval at Dresden, he went to study at Giessen in 1836. But his stay at Giessen was also short, and in 1837 he re-entered the factory. Again, however, he quarrelled with his father, and in 1838 went to Paris with introductions from Liebig. There he attended Jean Baptiste Dumas' lectures and worked with Auguste Cahours (1813-1891) on essential oils, especially cumin, in Michel Eugéne Chevreul's laboratory, while he earned a precarious living by teaching and making translations of some of Liebig's writings. In 1841, by the influence of Dumas, he was charged with the duties of the chair of chemistry at the Montpellier faculty of sciences, becoming titular professor in 1844. In 1842 he annoyed his friends in Paris by the matter and manner of a paper on the classification of organic compounds, and in 1845 he and his opinions were the subject of an attack by Liebig, unjustifiable in its personalities but not altogether surprising in view of his wayward disregard of his patron's advice. The two were reconciled in 1850, but his faculty for disagreeing with his friends did not make it easier for him to get another appointment after resigning the chair at Montpellier in 1851, especially as he was unwilling to go into the provinces. He obtained leave of absence from Montpellier in 1848 and from that year till 1855 resided in Paris. During that period he established an "École de chimie pratique" of which he had great hopes; but these were disappointed, and in 1855, after refusing the offer of a chair of chemistry at the new Zürich Polytechnic in 1854, he accepted the professorships of chemistry at the Faculty of Sciences and the École Polytechnique at Strassburg, where he died on the 19th of August in the following year. Although Gerhardt did some noteworthy experimental work—for instance, his preparation of acid anhydrides in 1852—his contributions to chemistry consist not so much in the discovery of new facts as in the introduction of new ideas that vitalized and organized an inert accumulation of old facts. In particular, with his fellow-worker Auguste Laurent (1807-1853), he did much to reform the methods of chemical formulation by insisting on the distinction between atoms, molecules and equivalents; and in his unitary system, directly opposed to the dualistic doctrines of Berzelius, he combined Dumas' substitution theory with the old radicle theory and greatly extended the notion of types of structure. His chief works were *Précis de chimie organique* (1844-1845), and *Traité de chimie organique* (1853-1856).

See *Charles Gerhardt, sa vie, son œuvre, sa correspondance*, by his son, Charles Gerhardt, and E. Grimaux (Paris, 1900).

GERHARDT, PAUL (*c.* 1606-1676), German hymn-writer, was born of a good middle-class family at Gräfenhainichen, a small town on the railway between Halle and Wittenberg, in 1606 or 1607—some authorities, indeed, give the date March 12, 1607, but neither the year nor the day is accurately known. His education appears to have been retarded by the troubles of the period, the Thirty Years' War having begun about the time he reached his twelfth year. After completing his studies for the church he is known to have lived for some years at Berlin as tutor in the family of an advocate named Berthold, whose daughter he subsequently married, on receiving his first ecclesiastical appointment at Mittelwald (a small town in the neighbourhood of Berlin) in 1651. In 1657 he accepted an invitation as "diaconus" to the Nicolaikirche of Berlin; but, in consequence of his uncompromising Lutheranism in refusing to accept the elector Frederick William's "syncretistic" edict of 1664, he was deprived in 1666. Though absolved from submission and restored to office early in the following year, on the petition of the citizens, his conscience did not allow him to retain a post which, as it appeared to him, could only be held on condition of at least a tacit repudiation of the Formula Concordiae, and for upwards of a year he lived in Berlin without fixed employment. In 1668 he was appointed archdeacon of Lübben in the duchy of Saxe-Merseburg, where, after a somewhat sombre ministry of eight years, he died on the 7th of June 1676. Gerhardt is the greatest hymn-writer of Germany, if not indeed of Europe. Many of his best-known hymns were originally published in various church hymn-books, as for example in that for Brandenburg, which appeared in 1658; others first saw the light in Johann Crüger's *Geistliche Kirchenmelodien* (1649) and *Praxis pietatis melica* (1656). The first complete set of them is the *Geistliche Andachten*, published in 1666-1667 by Ebeling, music director in Berlin. No hymn by Gerhardt of a later date than 1667 is known to exist.

The life of Gerhardt has been written by Roth (1829), by Langbecker (1841), by Schultz (1842), by Wildenhahn (1845) and by Bachmann (1863); also by Kraft in Ersch u. Gruber's *Allg. Encycl.* (1855). The best modern edition of the hymns, published by Wackernagel in 1843, has often been reprinted. There is an English translation by Kelly (*Paul Gerhardt's Spiritual Songs*, 1867).

GÉRICAULT, JEAN LOUIS ANDRÉ THÉODORE (1791-1824), French painter, the leader of the French realistic school, was born at Rouen in 1791. In 1808 he entered the studio of Charles Vernet, from which, in 1810, he passed to that of Guérin, whom he drove to despair by his passion for Rubens, and by the unorthodox manner in which he persisted in interpreting nature. At the Salon of 1812 Géricault attracted attention by his "Officier de Chasseurs à Cheval" (Louvre), a work in which he personified the cavalry in its hour of triumph, and turned to account the solid training received from Guérin in rendering a picturesque point of view which was in itself a protest against the cherished convictions of the pseudo-classical school. Two years later (1814) he re-exhibited this work accompanied with the reverse picture "Cuirassier blessé" (Louvre), and in both subjects called attention to the interest of contemporary aspects of life, treated neglected types of living form, and exhibited that mastery of and delight in the horse which was a feature of his character. Disconcerted by the tempest of contradictory opinion which arose over these two pictures, Géricault gave way to his enthusiasm for horses and soldiers, and enrolled himself in the *mousquetaires*. During the Hundred Days he followed the king to Bethune, but, on his regiment being disbanded, eagerly returned to his profession, left France for Italy in 1816, and at Rome nobly illustrated his favourite animal by his great painting "Course des Chevaux Libres." Returning to Paris, Géricault exhibited at the Salon of 1819 the "Radeau de la Méduse" (Louvre), a subject which not only enabled him to prove his zealous and scientific study of the human form, but contained those elements of the heroic and pathetic, as existing in situations of modern life, to which he had appealed in his earliest productions. Easily depressed or elated, Géricault took to heart the hostility which this work excited, and passed nearly two years in London, where the "Radeau" was exhibited with success, and where he executed many series of admirable lithographs now rare. At the close of 1822 he was again in Paris, and produced a great quantity of projects for vast compositions, models in wax, and a horse *écorché*, as preliminary to the production of an equestrian statue. His health was now completely undermined by various kinds of excess, and on the 26th of January 1824 he died, at the age of thirty-three.

Géricault's biography, accompanied by a *catalogue raisonné* of his works, was published by M.C. Clément in 1868.

GERIZIM, a mountain in the hill-country of Samaria, 2849 ft. above the sea-level, and enclosing, with its companion Ebal, the valley in which lies the town of Nāblus (Shechem). It is the holy place of the community of the Samaritans, who hold that it was the scene of the sacrifice of Isaac—a tradition accepted by Dean Stanley but no other western writers of importance. Here, on the formal entrance of the Israelites into the possession of the Promised Land, were pronounced the blessings connected with a faithful observance of the law (Josh. viii. 33, 34; cf. Deut. xi. 29, 30, xxvii. 12-26), the six tribes, Simeon, Levi, Judah, Issachar, Joseph and Benjamin, standing here for the purpose while the remaining tribes stood on Ebal to accept the curses attached to specific violations thereof. Gerizim was probably chosen as the mount of blessing as being on the right hand, the fortunate side, of a spectator facing east. The counter-suggestion of Eusebius and Jerome that the Ebal and Gerizim associated with this solemnity were not the Shechem mountains at all, but two small hills near Jericho, is no longer considered important. From this mountain Jotham spoke his parable to the elders of Shechem (Judg. ix. 7). Manasseh, the son of the Jewish high-priest in the days of Nehemiah, married the daughter of Sanballat and, about 432 B.C., erected on this mountain a temple for the Samaritans; it was destroyed by Hyrcanus about 300 years afterwards. Its site is a small level plateau a little under the summit of the mountain. Close to this is the place where the Passover is still annually celebrated in exact accordance with the rites prescribed in the Pentateuch. On the summit of the mountain, which commands a view embracing the greater part of Palestine, are a small Moslem shrine and the ruins of a castle probably dating from Justinian's time.

There was an octagonal Byzantine church here, but the foundations alone remain. Josephus describes it as the highest of the mountains of Samaria, but Ebal and Tell Azur are both higher.

(R. A. S. M.)

GERLACHE, ÉTIENNE CONSTANTIN, Baron de (1785-1871), Belgian politician and historian, was born at Biourge, Luxemburg, on the 24th of December 1785. He studied law in Paris and practised there for some time, but settled at Liege after the establishment of the kingdom of the Netherlands. As member of the states-general he was an energetic member of the opposition, and, though he repudiated an ultramontane policy, he supported the alliance of the extreme Catholics with the Liberal party, which paved the way for the revolution of 1830. On the outbreak of disturbance in August 1830 he still, however, thought the Orange-Nassau dynasty and the union with the Dutch states essential; but his views changed, and, after holding various offices in the provisional government, he became president of congress, and brought forward the motion inviting Leopold of Saxe-Coburg to become king of the Belgians. In 1832 he was president of the chamber of representatives, and for thirty-five years he presided over the court of appeal. He presided over the Catholic congresses held at Malines between 1863 and 1867. That his early Liberal views underwent some modification is plain from the Conservative principles enunciated in his *Essai sur le mouvement des partis en Belgique* (Brussels, 1852). As an historian his work was strongly coloured by his anti-Dutch prejudices and his Catholic predilections. His *Histoire des Pays-Bas depuis 1814 jusqu'en 1830* (Brussels, 2 vols., 1839), which reached a fourth edition in 1875, was a piece of special pleading against the Dutch domination. The most important of his other works were his *Histoire de Liége* (Brussels, 1843) and his *Études sur Salluste et sur quelques-uns des principaux historiens de l'antiquité* (Brussels, 1847).

A complete edition of his works (6 vols., Brussels, 1874-1875) contains a biography by M. Thonissen.

GERLE, CHRISTOPHE ANTOINE (1736-*c.* 1801), French revolutionist and mystic, was born at Riom in Auvergne. Entering the Carthusian order early in life, he became prior of Laval-Dieu in Perche, and afterwards of Pont-Sainte-Marie at Moulins. Elected deputy to the states-general in 1789, Gerle became very popular, and though he had no seat in the assembly until after the Tennis Court oath, being only deputy *suppléant*, he is represented in David's classic painting as taking part in it. In 1792 he was chosen elector of Paris. In the revolutionary turmoil Gerle developed a strong vein of mysticism, mingled with ideas of reform, and in June 1790 the prophetic powers of Suzanne Labrousse (1747-1821), a visionary who had predicted the Revolution ten years before, were brought by him to the notice of the Convention. In Paris, where he lived first with a spiritualistic doctor and afterwards, like Robespierre, at the house of a cabinetmaker, his mystical tendencies were strengthened. The insane fancies of Catherine Théot, a convent servant turned prophetess, who proclaimed herself the Virgin, the "Mother of God" and the "new Eve," were eminently attractive to Gerle; in the person of Robespierre he recognized the Messiah, and at the meetings of the Théotists he officiated with the aged prophetess as co-president. But the activities of Catherine and her adepts were short-lived. The Théotists' cult of Robespierre was a weapon in the hands of his opponents; and shortly after the festival of the Supreme Being, Vadier made a report to the Convention calling for the prosecution of Catherine, Gerle and others as fanatics and conspirators. They were arrested, thrown into prison and, in the confusion of Robespierre's fall, apparently forgotten. Catherine died in prison, but Gerle, released by the Directory, became one of the editors of the *Messager du soir*, and was afterwards in the office of Pierre Bénézech (1775-1802), minister of the interior. Having renounced his monastic vows in Paris, he is thought to have married, towards the close of his life, Christine Raffet, aunt of the artist Denis Raffet. The date of his death is uncertain.

GERMAN BAPTIST BRETHREN, or German Brethren, a sect of American Baptists which originated in Germany, and whose members are popularly known in the United States as "Dunkers," "Dunkards" or "Tunkers," corruptions of the German verb *tunken*, "to dip," in recognition of the sect's continued adherence to the practice of trine immersion. The sect was the outcome of one of the many Pietistic movements of the 17th century, and was founded in 1708 by Andrew Mack of Swartzenau, Germany, and seven of his followers, upon the general issue that both the Lutheran and Reformed churches were taking liberties with the literal teachings of the Scriptures. The new sect was scarcely organized in Germany when its members were compelled by persecution to take refuge in Holland, whence they emigrated to Pennsylvania, in small companies, between 1719 and 1729. The first congregation in America was organized on Christmas Day 1723 by Peter Becker at Germantown, Pennsylvania, and here in 1743 Christopher Sauer, one of the sect's first pastors, and a printer by trade, printed the first Bible (a few copies of which are still in existence) published in a European language in America. From Pennsylvania the sect spread chiefly westward, and, after various vicissitudes, caused by defections and divisions due to doctrinal differences, in 1908 were most numerous in Pennsylvania, Maryland, Virginia, Ohio, Indiana, Illinois, Iowa, Missouri, Nebraska, Kansas and North Dakota.

There is much uncertainty about the early theological history of the sect, but it is probable that Mack and his followers were influenced by both the Greek Catholics and the Waldensians. P.H. Bashor in his historical sketch, read before the World's Fair Congress of the Brethren Church (1894), says: "From the history of extended labour by Greek missionaries, from the active propaganda of doctrine by scattered Waldensian refugees, through parts of Germany and Bavaria, from the credence that may generally be given to local tradition, and from the strong similarity between the three churches in general features of circumstantial service, the conclusion, without additional evidence, is both reasonable and natural that the founders of the new church received their teaching, their faith and much of their church idea from intimate acquaintance with the established usages of both societies, and from their amplification and enforcement by missionaries and pastors.... In doctrine the church has been from the first contentious for believers' baptism, holding that nowhere in the New Testament can be found any authority even by inference, precept or example for the baptism of infants. On questions of fundamental doctrine they held to the belief in one self-existing supreme ruler of the Universe —the Divine Godhead—the Father, the Son and the Holy Spirit—the tri-personality." Hence their practice of triple immersion, which provides that the candidate shall kneel in the water and be immersed, face first, three times—in the name of the Father, the Son and the Holy Spirit. (From this practice the sect received the less commonly used nickname "Dompelaers," meaning "tumblers.") They accept implicitly and literally the New Testament as the infallible guide in spiritual matters, holding it to be the inspired word of God, revealed through Jesus Christ and, by inspiration, through the Apostles. They also believe in the inspiration of the Old Testament. In their celebration of the communion service they aim exactly to imitate the forms observed by Christ. It is celebrated in the evening, and is accompanied by the ancient love feast (partaken by all communicants seated at a common table), by the ceremony of the washing of feet and by the salutation of the holy kiss, the three last-named ceremonies being observed by the sexes separately. They pray over their sick and, when so requested, anoint them with oil. They are rigid non-resistants, and will not bear arms or study the art of war; they refuse to take oaths, and discountenance going to law over issues that can possibly be settled out of the courts. The taking of interest was at first forbidden, but that prohibition is not now insisted upon. They "testify" against the use of intoxicating liquor and tobacco, and advocate simplicity in dress. In its earlier history the sect opposed voting or taking any active part in political affairs, but these restrictions have quite generally disappeared. Similarly the earlier prejudice against higher education, and the maintenance of institutions for that purpose, has given place to greater liberality along those lines. In 1782 the sect forbade slave-holding by its members.

The church officers (generally unpaid) comprise bishops (or ministers), elders, teachers, deacons (or visiting brethren) and deaconesses—chiefly aged women who are permitted at times to take leading parts in church services. The bishops are chosen from the teachers; they are itinerant, conduct marriage and funeral services, and are present at communions, at ordinations, when deacons are chosen or elected, and at trials for the excommunication of members. The elders are the first or oldest teachers of congregations, for which there is no regular bishop. They have charge of the meetings of such congregations, and participate in excommunication proceedings, besides which they preach, exhort, baptize, and may, when needed, take the offices of the deacons. The teachers, who are chosen by vote, may also exhort or preach, when their services are needed for such purposes, and may, at the request of a bishop, perform marriage or baptismal ceremonies. The deacons have general oversight of the material affairs of the congregation, and are especially charged with the care of poor widows and their children. In the discharge of these duties they are expected to visit each family in the

congregation at least once a year. The government of the church is chiefly according to the congregational principle, and the women have an equal voice with the men; but annual meetings, attended by the bishops, teachers and other delegates from the several congregations are held, and at these sessions the larger questions involving church polity are considered and decided by a committee of five bishops.

An early secession from the general body of Dunkers was that of the Seventh Day Dunkers, whose distinctive principle was that the seventh day was the true Sabbath. Their founder was Johann Conrad Beissel (1690-1768), a native of Eberbach and one of the first emigrants, who, after living as a hermit for several years on Mill Creek, Lancaster county, Pennsylvania, founded the sect (1725), then again lived as a hermit in a cave (formerly occupied by another hermit, one Elimelech) on the Cocalico Creek in Pennsylvania, and in 1732-1735 established a semi-monastic community (the "Order of the Solitary") with a convent (the "Sister House") and a monastery (the "Brother House") at Ephrata, in what is now Lancaster county, about 55 m. W. by N. from Philadelphia. Among the industries of the men were printing (in both English and German), book-binding, tanning, quarrying, and the operation of a saw mill, a bark mill, and perhaps a pottery; the women did embroidery, quilting, and engrossing in a beautiful but peculiar hand, known as Fracturschrift.[1] The monastic feature was gradually abandoned, and in 1814 the Society was incorporated as the Seventh Day Baptists, its affairs being placed in the hands of a board of trustees. More important in the history of the modern church was the secession, in the decade between 1880 and 1890, of the Old Order Brethren, who opposed Sunday Schools and the missionary work of the Brethren, in Asia Minor and India, and in several European countries; and also in 1882 of the radicals, or Progressives, who objected to a distinctive dress and to the absolute supremacy of the yearly conferences. Higher education was long forbidden and is consistently opposed by the Old Order. The same element in the Brethren opposed a census, but according to Howard Miller's census of 1880 (*Record of the Faithful*) the number of Dunkers was 59,749 in that year; by the United States census of 1890 it was then 73,795; the figures for 1904 are given by Henry King Carroll in his "Statistics of the Churches" in the *Christian Advocate* (Jan. 5, 1905): Conservatives, or German Baptist Brethren, 95,000; Old Order, 4000; Progressives or Brethren, 15,000; Seventh Day, 194; total, 114,194. In 1909 the German Baptist Brethren had an estimated membership of approximately 100,000, and the Brethren of 18,000. The main body, or Conservatives, support schools at Huntingdon, Pennsylvania; Mt. Morris, Illinois; Lordsburg, California; McPherson, Kansas; Bridgewater, Virginia; Canton, Ohio; Chicago, Illinois; North Manchester, Indiana; Plattsburg, Missouri; Elizabethtown, Pennsylvania; Union Bridge, Maryland; and Fruitdale, Alabama. They have a publishing house at Elgin, Illinois, and maintain missions in Denmark, Sweden, France, Italy, India and China. The Progressives have a college, a theological seminary and a publishing house at Ashland, Ohio; and they carry on missionary work in Canada, South America and Persia.

AUTHORITIES.—Lamech and Agrippa, *Chronicon Ephratense*, in German (Ephrata, Penn., 1786) and in English (Lancaster, 1889); G.N. Falkenstein, "The German Baptist Brethren, or Dunkers," part 8 of "Pennsylvania: The German Influence in its Settlement and Development," in vol. x. of the *Pennsylvania German Society, Proceedings and Addresses* (Lancaster, Penn., 1900); Julius Friedrich Sachse, *The German Sectarians of Pennsylvania, 1742-1800: A Critical and Legendary History of the Ephrata Cloister and the Dunkers* (Philadelphia, 1900); and John Lewis Gillin, *The Dunkers: A Sociological Interpretation* (New York, 1906), a doctor's dissertation, with full bibliography.

1 Beissel (known in the community as "Friedsam") was their leader until his death; he published several collections of hymns. The stone over his grave bears the inscription: "Here rests an outgrowth of the love of God, 'Friedsam,' a Solitary Brother, afterwards a leader of the Solitary and the Congregation of Grace in and around Ephrata ... Fell asleep July 6, 1768, in the 52nd year of his spiritual life, but the 72nd year and fourth month of his natural life." The borough of Ephrata was separated from the township in 1891. Pop. (1900) of the borough, 2451; of the township, 2390. The "Brother House" and the "Sister House" are still standing (though in a dilapidated condition). In 1777, after the battle of Brandywine, many wounded American soldiers were nursed here by the Sisters, and about 200 are buried here.

GERMAN CATHOLICS (*Deutschkatholiken*), the name assumed in Germany towards the close of 1844 by certain dissentients from the Church of Rome. The most prominent leader of the German Catholic movement was Johann Ronge, a priest who in the *Sächsische Vaterlandsblätter* for the 15th of October 1844 made a vigorous attack upon Wilhelm Arnoldi,

bishop of Trier since 1842, for having ordered (for the first time since 1810) the exposition of the "holy coat of Trier," alleged to be the seamless robe of Christ, an event which drew countless pilgrims to the cathedral. Ronge, who had formerly been chaplain at Grottkau, was then a schoolmaster at Laurahütte near the Polish border. The article made a great sensation, and led to Ronge's excommunication by the chapter of Breslau in December 1844. The ex-priest received a large amount of public sympathy, and a dissenting congregation was almost immediately formed at Breslau with a very simple creed, in which the chief articles were belief in God the Father, creator and ruler of the universe; in Jesus Christ the Saviour, who delivers 771
from the bondage of sin by his life, doctrine and death; in the operation of the Holy Ghost; in a holy, universal, Christian church; in forgiveness of sins and the life everlasting. The Bible was made the sole rule, and all external authority was barred. Within a few weeks similar communities were formed at Leipzig, Dresden, Berlin, Offenbach, Worms, Wiesbaden and elsewhere; and at a "council" convened at Leipzig at Easter 1845, twenty-seven congregations were represented by delegates, of whom only two or at most three were in clerical orders.

Even before the beginning of the agitation led by Ronge, another movement fundamentally distinct, though in some respects similar, had been originated at Schneidemühl, Posen, under the guidance of Johann Czerski (1813-1893), also a priest, who had come into collision with the church authorities on the then much discussed question of mixed marriages, and also on that of the celibacy of the clergy. The result had been his suspension from office in March 1844; his public withdrawal, along with twenty-four adherents, from the Roman communion in August; his excommunication; and the formation, in October, of a "Christian Catholic" congregation which, while rejecting clerical celibacy, the use of Latin in public worship, and the doctrines of purgatory and transubstantiation, retained the Nicene theology and the doctrine of the seven sacraments. Czerski had been at some of the sittings of the "German Catholic" council of Leipzig; but when a formula somewhat similar to that of Breslau had been adopted, he refused his signature because the divinity of Christ had been ignored, and he and his congregation continued to retain by preference the name of "Christian Catholics," which they had originally assumed. Of the German Catholic congregations which had been represented at Leipzig some manifested a preference for the fuller and more positive creed of Schneidemühl, but a great majority continued to accept the comparatively rationalistic position of the Breslau school. The number of these rapidly increased, and the congregations scattered over Germany numbered nearly 200. External and internal checks, however, soon limited this advance. In Austria, and ultimately also in Bavaria, the use of the name German Catholics was officially prohibited, that of "Dissidents" being substituted, while in Prussia, Baden and Saxony the adherents of the new creed were laid under various disabilities, being suspected both of undermining religion and of encouraging the revolutionary tendencies of the age. Ronge himself was a foremost figure in the troubles of 1848; after the dissolution of the Frankfort parliament he lived for some time in London, returning in 1861 to Germany. He died at Vienna on the 26th of October 1887. In 1859 some of the German Catholics entered into corporate union with the "Free Congregations," an association of free-thinking communities that had since 1844 been gradually withdrawing from the orthodox Protestant Church, when the united body took the title of "The Religious Society of Free Congregations." Before that time many of the congregations which were formed in 1844 and the years immediately following had been dissolved, including that of Schneidemühl itself, which ceased to exist in 1857. There are now only about 2000 strict German Catholics, all in Saxony. The movement has been superseded by the Old Catholic (*q.v.*) organization.

See G.G. Gervinus, *Die Mission des Deutschkatholicismus* (1846); F. Kampe, *Das Wesen des Deutschkatholicismus* (1860); Findel, *Der Deutschkatholicismus in Sachsen* (1895); Carl Mirbt, in Herzog-Hauck's *Realencyk. für prot. Theol.* iv. 583.

GERMAN EAST AFRICA, a country occupying the east-central portion of the African continent. The colony extends at its greatest length north to south from 1° to 11° S., and west to east from 30° to 40° E. It is bounded E. by the Indian Ocean (the coast-line extending from 4° 20′ to 10° 40′ S.), N.E. and N. by British East Africa and Uganda, W. by Belgian Congo, S.W. by British Central Africa and S. by Portuguese East Africa.

Area and Boundaries.—On the north the boundary line runs N.W. from the mouth of the Umba river to Lake Jipe and Mount Kilimanjaro including both in the protectorate, and thence to Victoria Nyanza, crossing it at 1° S., which parallel it follows till it reaches 30° E. In the west the frontier is as follows: From the point of intersection of 1° S. and 30° E., a line running S. and S.W. to the north-west end of Lake Kivu, thence across that lake near its western shore, and along the river Rusizi, which issues from it, to the spot where the Rusizi enters the north end of Lake Tanganyika; along the middle line of Tanganyika to near its southern end, when it is deflected eastward to the point where the river Kalambo enters the lake (thus leaving the southern end of Tanganyika to Great Britain). From this point the frontier runs S.E. across the plateau between Lakes Tanganyika and Nyasa, in its southern section following the course of the river Songwe. Thence it goes down the middle of Nyasa as far as 11° 30′ S. The southern frontier goes direct from the last-named point eastward to the Rovuma river, which separates German and Portuguese territory. A little before the Indian Ocean is reached the frontier is deflected south so as to leave the mouth of the Rovuma in German East Africa. These boundaries include an area of about 364,000 sq. m. (nearly double the size of Germany), with a population estimated in 1910 at 8,000,000. Of these above 10,000 were Arabs, Indians, Syrians and Goanese, and 3000 Europeans (over 2000 being Germans). The island of Mafia (see below) is included in the protectorate.

Physical Features.—The coast of German East Africa (often spoken of as the Swahili coast, after the inhabitants of the seaboard) is chiefly composed of coral, is little indented, and is generally low, partly sandy, partly rich alluvial soil covered with dense bush or mangroves. Where the Arabs have established settlements the coco-palm and mango tree introduced by them give variety to the vegetation. The coast plain is from 10 to 30 m. wide and 620 m. long; it is bordered on the west by the precipitous eastern side of the interior plateau of Central Africa. This plateau, considerably tilted from its horizontal position, attains its highest elevation north of Lake Nyasa (see Livingstone Mountains), where several peaks rise over 7000 ft., one to 9600, while its mean altitude is about 3000 to 4000 ft. From this region the country slopes towards the north-west, and is not distinguished by any considerable mountain ranges. A deep narrow

gorge, the so-called “eastern rift-valley,” traverses the middle of the plateau in a meridional direction. In the northern part of the country it spreads into several side valleys, from one of which rises the extinct volcano Kilimanjaro (*q.v.*), the highest mountain in Africa (19,321 ft.). Its glaciers send down a thousand rills which combine to form the Pangani river. About 40 m. west of Kilimanjaro is Mount Meru (14,955 ft.), another volcanic peak, with a double crater. The greater steepness of its sides makes Meru in some aspects a more striking object than its taller neighbour. South-east of Mount Kilimanjaro are the Pare Mountains and Usambara highlands, separated from the coast by a comparatively narrow strip of plain. To the south of the Usambara hills, and on the eastern edge of the plateau, are the mountainous regions of Nguru (otherwise Unguru), Useguha and Usagara. As already indicated, the southern half of Victoria Nyanza and the eastern shores, in whole or in part, of Lakes Kivu, Tanganyika and Nyasa, are in German territory. (The lakes are separately described.) Several smaller lakes occur in parts of the eastern rift-valley. Lake Rukwa (*q.v.*) north-west of Nyasa is presumably only the remnant of a much larger lake. Its extent varies with the rainfall of each year. North-west of Kilimanjaro is a sheet of water known as the Natron Lake from the mineral alkali it contains. In the northern part of the colony the Victoria Nyanza is the dominant physical feature. The western frontier coincides with part of the eastern wall of another depression, the Central African or Albertine rift-valley, in which lie Tanganyika, Kivu and other lakes. Along the north-west frontier north of Kivu are volcanic peaks (see Mfumbiro).

The country is well watered, but with the exception of the Rufiji the rivers, save for a few miles from their mouths, are unnavigable. The largest streams are the Rovuma and Rufiji (*q.v.*), both rising in the central plateau and flowing to the Indian Ocean. Next in importance is the Pangani river, which, as stated above, has its head springs on the slopes of Kilimanjaro. Flowing in a south-easterly direction it reaches the sea after a course of some 250 m. The Wami and Kingani, smaller streams, have their origin in the mountainous region fringing the central plateau, and reach the ocean opposite the island of Zanzibar. Of inland river systems there are four—one draining to Victoria Nyanza, another to Tanganyika, a third to Nyasa and a fourth to Rukwa. Into Victoria Nyanza are emptied, on the east, the waters of the Mori and many smaller streams; on the west, the Kagera (*q.v.*), besides smaller rivers. Into Tanganyika flows the Malagarasi, a considerable river with many affluents, draining the west-central part of the plateau. The Kalambo river, a comparatively small stream near the southern end of Tanganyika, flows in a south-westerly direction. Not far from its mouth there is a magnificent fall, a large volume of water falling 600 ft. sheer over a rocky ledge of horse-shoe shape. Of the streams entering Nyasa the Songwe has been mentioned. The Ruhuhu, which enters Nyasa in 10° 30′ S., and its tributaries drain a considerable area west of 36° E. The chief feeders of Lake Rukwa are the Saisi and the Rupa-Songwe.

Mafia Island lies off the coast immediately north of 8° N. It has an area of 200 sq. m. The island is low and fertile, and extensively planted with coco-nut palms. It is continued southwards by an extensive reef, on which stands the chief village, Chobe, the residence of a few Arabs and Banyan traders. Chobe stands on a shallow creek almost inaccessible to shipping.

Geology.—The narrow foot-plateau of British East Africa broadens out to the south of Bagamoyo to a width of over 100 m. This is covered to a considerable extent by rocks of recent and late Tertiary ages. Older Tertiary rocks form the bluffs of Lindi. Cretaceous marls and limestones appear at intervals, extending in places to the edge of the upper plateau, and are extensively developed on the Makonde plateau. They are underlain by Jurassic rocks, from beneath which sandstones and shales yielding *Glossopteris browniana* var. *indica*, and therefore of Lower Karroo age, appear in the south but are overlapped on the north by Jurassic strata. The central plateau consists almost entirely of metamorphic rocks with extensive tracts of granite in Unyamwezi. In the vicinity of Lakes Nyasa and Tanganyika, sandstones and shales of Lower Karroo age and yielding seams of coal are considered to owe their position and preservation to being let down by rift faults into hollows of the crystalline rocks. In Karagwe certain quartzites, slates and schistose sandstones resemble the ancient gold-bearing rocks of South Africa.

The volcanic plateau of British East Africa extends over the boundary in the region of Kilimanjaro. Of the sister peaks, Kibo and Mawenzi, the latter is far the oldest and has been greatly denuded, while Kibo retains its crateriform shape intact. The rift-valley faults continue down the depression, marked by numerous volcanoes, in the region of the Natron Lake and Lake Manyara; while the steep walls of the deep depression of Tanganyika and Nyasa represent the western rift system at its maximum development.

Fossil remains of saurians of gigantic size have been found; one thigh bone measures 6 ft. 10 in., the same bone in the *Diplodocus Carnegii* measuring only 4 ft. 11 in.

Climate.—The warm currents setting landwards from the Indian Ocean bring both moisture and heat, so that the Swahili coast has a higher temperature and heavier rainfall than the Atlantic seaboard under the same parallels of latitude. The mean temperature on the west and east coasts of Africa is 72° and 80° Fahr. respectively, the average rainfall in Angola 36 in., in

Dar-es-Salaam 60 in. On the Swahili coast the south-east monsoon begins in April and the north-east monsoon in November. In the interior April brings south-east winds, which continue until about the beginning of October. During the rest of the year changing winds prevail. These winds are charged with moisture, which they part with on ascending the precipitous side of the plateau. Rain comes with the south-east monsoon, and on the northern part of the coast the rainy season is divided into two parts, the great and the little Masika: the former falls in the months of September, October, November; the latter in February and March. In the interior the climate has a more continental character, and is subject to considerable changes of temperature; the rainy season sets in a little earlier the farther west and north the region, and is well marked, the rain beginning in November and ending in April; the rest of the year is dry. On the highest parts of the plateau the climate is almost European, the nights being sometimes exceedingly cold. Kilimanjaro has a climate of its own; the west and south sides of the mountain receive the greatest rainfall, while the east and north sides are dry nearly all the year. Malarial diseases are rather frequent, more so on the coast than farther inland. The Kilimanjaro region is said to enjoy immunity. Smallpox is frequent on the coast, but is diminishing before vaccination; other epidemic diseases are extremely rare.

Flora and Fauna.—The character of the vegetation varies with and depends on moisture, temperature and soil. On the low littoral zone the coast produced a rich tropical bush, in which the mangrove is very prominent. Coco-palms and mango trees have been planted in great numbers, and also many varieties of bananas. The bush is grouped in copses on meadows, which produce a coarse tall grass. The river banks are lined with belts of dense forest, in which useful timber occurs. The *Hyphaene* palm is frequent, as well as various kinds of gum-producing mimosas. The slopes of the plateau which face the rain-bringing monsoon are in some places covered with primeval forest, in which timber is plentiful. The silk-cotton tree (*Bombax ceiba*), miomba, tamarisk, copal tree (*Hymenaea courbaril*) are frequent, besides sycamores, banyan trees (*Ficus indica*) and the deleb palm (*Borassus aethiopum*). It is here we find the *Landolphia florida*, which yields the best rubber. The plateau is partly grass land without bush and forest, partly steppe covered with mimosa bush, which sometimes is almost impenetrable. Mount Kilimanjaro and Mount Meru exhibit on a vertical scale the various forms of vegetation which characterize East Africa (see KILIMANJARO).

East Africa is rich in all kinds of antelope, and the elephant, rhinoceros and hippopotamus are still plentiful in parts. Characteristic are the giraffe, the chimpanzee and the ostrich. Buffaloes and zebras occur in two or three varieties. Lions and leopards are found throughout the country. Crocodiles are numerous in all the larger rivers. Snakes, many venomous, abound. Of birds there are comparatively few on the steppe, but by rivers, lakes and swamps they are found in thousands. Locusts occasion much damage, and ants of various kinds are often a plague. The tsetse fly (*Glossina morsitans*) infests several districts; the sand-flea has been imported from the west coast. Land and water turtles are numerous.

Inhabitants.—On the coast and at the chief settlements inland are Arab and Indian immigrants, who are merchants and agriculturists. The Swahili (*q.v.*) are a mixed Bantu and Semitic race inhabiting the seaboard. The inhabitants of the interior may be divided into two classes, those namely of Bantu and those of Hamitic stock. What may be called the indigenous population consists of the older Bantu races. These tribes have been subject to the intrusion from the south of more recent Bantu folk, such as the Yao, belonging to the Ama-Zulu branch of the race, while from the north there has been an immigration of Hamito-Negroid peoples. Of these the Masai and Wakuafi are found in the region between Victoria Nyanza and Kilimanjaro. The Masai (*q.v.*) and allied tribes are nomads and cattle raisers. They are warlike, and live in square mud-plastered houses called *tembe* which can be easily fortified and defended. The Bantu tribes are in general peaceful agriculturists, though the Bantus of recent immigration retain the warlike instincts of the Zulus. The most important group of the Bantus is the Wanyamwezi (see UNYAMWEZI), divided into many tribes. They are spread over the central plains, and have for neighbours on the south-east, between Nyasa and the Rufiji, the warlike Wahehe. The Wangoni (Angoni), a branch of the Ama-Zulu, are widely spread over the central and Nyasa regions. Other well-known tribes are the Wasambara, who have given their name to the highlands between Kilimanjaro and the coast, and the Warundi, inhabiting the district between Tanganyika and the Kagera. In Karagwe, a region adjoining the south-west shores of Victoria Nyanza, the Bahima are the ruling caste. Formerly Karagwe under its Bahima kings was a powerful state. Many different dialects are spoken by the Bantu tribes, Swahili being the most widely known (see BANTU LANGUAGES). Their religion is the worship of spirits, ancestral and otherwise, accompanied by a vague and undefined belief in a Supreme Being, generally regarded as indifferent to the doings of the people.

The task of civilizing the natives is undertaken in various ways by the numerous Protestant and Roman Catholic missions established in the colony, and by the government. The slave trade has been abolished, and though domestic slavery is allowed, all children of slaves born after the 31st of December 1905 are free. For certain public works the Germans enforce a system of compulsory labour. Efforts are made by instruction in government and mission

schools to spread a knowledge of the German language among the natives, in order to fit them for subordinate posts in administrative offices, such as the customs. Native chiefs in the interior are permitted to help in the administration of justice. The Mission du Sacré Cœur in Bagamoyo, the oldest mission in the colony, has trained many young negroes to be useful mechanics. The number of native Christians is small. The Moslems have vigorous and successful missions.

Chief Towns.—The seaports of the colony are Tanga (pop. about 6000), Bagamoyo 5000 (with surrounding district some 18,000), Dar-es-Salaam 24,000, Kilwa 5000, (these have separate notices), Pangani, Sadani, Lindi and Mikindani. Pangani (pop. about 3500) is situated at the mouth of the river of the same name; it serves a district rich in tropical products, and does a thriving trade with Zanzibar and Pemba. Sadani is a smaller port midway between Pangani and Bagamoyo. Lindi (10° 0′ S., 39° 40′ E.) is 80 m. north of Cape Delgado. Lindi (Swahili for The Deep Below) Bay runs inland 6 m. and is 3 m. across, affording deep anchorage. Hills to the west of the bay rise over 1000 ft. The town (pop. about 4000) is picturesquely situated on the north side of the bay. The Arab *boma*, constructed in 1800, has been rebuilt by the Germans, who have retained the fine sculptured gateway. Formerly a rendezvous for slave caravans Lindi now has a more legitimate trade in white ivory. Mikindani is the most southern port in the colony. Owing to the prevalence of malaria there, few Europeans live at the town, and trade is almost entirely in the hands of Banyans.

Inland the principal settlements are Korogwe, Mrogoro, Kilossa, Mpapua and Tabora. Korogwe is in the Usambara hills, on the north bank of the Pangani river, and is reached by railway from Tanga. Mrogoro is some 140 m. due west of Dar-es-Salaam, and is the first important station on the road to Tanganyika. Kilossa and Mpapua are farther inland on the same caravan route. Tabora (pop. about 37,000), the chief town of the Wanyamwezi tribes, occupies an important position on the central plateau, being the meeting-place of the trade routes from Tanganyika, Victoria Nyanza and the coast. In the railway development of the colony Tabora is destined to become the central junction of lines going north, south, east and west.

On Victoria Nyanza there are various settlements. Mwanza, on the southern shore, is the lake terminus of the route from Bagamoyo: Bukoba is on the western shore, and Schirati on the eastern shore; both situated a little south of the British frontier. On the German coast of Tanganyika are Ujiji (*q.v.*), pop. about 14,000, occupying a central position; Usumbura, at the northern end of the lake where is a fort built by the Germans; and Bismarckburg, near the southern end. On the shores of the lake between Ujiji and Bismarckburg are four stations of the Algerian “White Fathers,” all possessing churches, schools and other stone buildings. Langenburg is a settlement on the north-east side of Lake Nyasa. The government station, called New Langenburg, occupies a higher and more healthy site north-west of the lake. Wiedhafen is on the east side of Nyasa at the mouth of the Ruhuhu, and is the terminus of the caravan route from Kilwa.

Productions.—The chief wealth of the country is derived from agriculture and the produce of the forests. From the forests are obtained rubber, copal, bark, various kinds of fibre, and timber (teak, mahogany, &c.). The cultivated products include coffee, the coco-nut palm, tobacco, sugar-cane, cotton, vanilla, sorghum, earth-nuts, sesame, maize, rice, beans, peas, bananas (in large quantities), yams, manioc and hemp. Animal products are ivory, hides, tortoise-shell and pearls. On the plateaus large numbers of cattle, goats and sheep are reared. The natives have many small smithies. Gold, coal, iron, graphite, copper and salt have been found. Garnets are plentiful in the Lindi district, and agates, topaz, moonstone and other precious stones are found in the colony. The chief gold and iron deposits are near Victoria Nyanza. In the Mwanza district are conglomerate reefs of great extent. Mining began in 1905, Mica is mined near Mrogoro. The chief exports are sisal fibre, rubber, hides and skins, wax, ivory, copra, coffee, ground-nuts and cotton. The imports are chiefly articles of food, textiles, and metals and hardware. More than half the entire trade, both export and import, is with Zanzibar. Germany takes about 30% of the trade. In the ten years 1896-1905 the value of the external trade increased from about £600,000 to over £1,100,000. In 1907 the imports were valued at £1,190,000, the exports at £625,000.

Numerous companies are engaged in developing the resources of the country by trading, planting and mining. The most important is the *Deutsch-Ostafrikanische Gesellschaft*, founded in 1885, which has trading stations in each seaport, and flourishing plantations in various parts of the country. It is the owner of vast tracts of land. From 1890 to 1903 this company was in possession of extensive mining, railway, banking and coining rights, but in the last-named year, by agreement with the German government, it became a land company purely. The company has a right to a fifth part of the land within a zone of 10 m. on either side of any railway built in the colony previously to 1935. In addition to the companies a comparatively large number of private individuals have laid out plantations, Usambara and Pare having become favourite districts for agricultural enterprise. In the delta of the Rufiji and in the Kilwa district cotton-growing was begun in 1901. The plantations are all worked by native labour. The government

possesses large forest reserves.

Communications.—Good roads for foot traffic have been made from the seaports to the trading stations on Lakes Nyasa, Tanganyika and Victoria. Caravans from Dar-es-Salaam to Tanganyika take 60 days to do the journey. The lack of more rapid means of communication hindered the development of the colony and led to economic crises (1898-1902), which were intensified, and in part created, by the building of a railway in the adjacent British protectorate from Mombasa to Victoria Nyanza, the British line securing the trade with the lake. At that time the only railway in the country was a line from Tanga to the Usambara highlands. This railway passes through Korogwe (52 m. from Tanga) and is continued via Mombo to Wilhelmstal, a farther distance of 56 m. The building of a trunk line from Dar-es-Salaam to Mrogoro (140 m.), and ultimately to Ujiji by way of Tabora, was begun in 1905. Another proposed line would run from Kilwa to Wiedhafen on Lake Nyasa. This railway would give the quickest means of access to British Central Africa and the southern part of Belgian Congo. On each of the three lakes is a government steamer. British steamers on Victoria Nyanza maintain communication between the German stations and the take terminus of the Uganda railway. The German East Africa Line of Hamburg runs a fleet of first-class steamers to East Africa, which touch at Tanga, Dar-es-Salaam and Zanzibar. There is a submarine cable from Dar-es-Salaam to Zanzibar, and an overland line connecting all the coast stations.

Administration, Revenue, &c.—For administrative purposes the country is divided into districts (*Bezirksämter*), and stations (*Stationsbezirke*). Each station has a chief, who is subordinate to the official of his district, these in their turn being under the governor, who resides in Dar-es-Salaam. The governor is commander of the colonial force, which consists of natives under white officers. District councils are constituted, on which the European merchants and planters are represented. Revenue is raised by taxes on imports and exports, on licences for the sale of land and spirituous liquors, and for wood-cutting, by harbour and other dues, and a hut tax on natives. The deficiency between revenue and expenditure is met by a subsidy from the imperial government. In no case during the first twenty-one years’ existence of the colony had the local revenue reached 60% of the local expenditure, which in normal years amounted to about £500,000. In 1909, however, only the expenditure necessary for military purposes (£183,500) was received by way of subsidy.

History.—Until nearly the middle of the 19th century only the coast lands of the territory now forming German East Africa were known either to Europeans or to the Arabs. When at the beginning of the 16th century the Portuguese obtained possession of the towns along the East African coast, they had been, for periods extending in some cases fully five hundred years, under Arab dominion. After the final withdrawal of the Portuguese in the early years of the 18th century, the coast towns north of Cape Delgado fell under the sway of the Muscat Arabs, passing from them to the sultan of Zanzibar. From about 1830, or a little earlier, the Zanzibar Arabs began to penetrate inland, and by 1850 had established themselves at Ujiji on the eastern shore of Lake Tanganyika. The Arabs also made their way south to Nyasa. This extension of Arab influence was accompanied by vague claims on the part of the sultan of Zanzibar to include all these newly opened countries in his empire. How far from the coast the real authority of the sultan extended was never demonstrated. Zanzibar at this time was in semi-dependence on India, and British influence was strong at the court of Bargash, who succeeded to the sultanate in 1870. Bargash in 1877 offered to Sir (then Mr) William Mackinnon a lease of all his mainland territory. The offer, made in the year in which H.M. Stanley’s discovery of the course of the Congo initiated the movement for the partition of the continent, was declined. British influence was, however, still so powerful in Zanzibar that the agents of the German Colonization Society, who in 1884 sought to secure for their country territory on the east coast, deemed it prudent to act secretly, so that both Great Britain and Zanzibar might be confronted with accomplished facts. Making their way inland, three young Germans, Karl Peters, Joachim Count Pfeil and Dr Jühlke, concluded a “treaty” in November 1884 with a chieftain in Usambara who was declared to be independent of Zanzibar. Other treaties followed, and on the 17th of February 1885, the German emperor granted a charter of protection to the Colonization Society. The German acquisitions were resented by Zanzibar, but were acquiesced in by the British government (the second Gladstone administration). The sultan was forced to acknowledge their validity, and to grant a German company a lease of his mainland territories south of the mouth of the Umba river, a British company formed by Mackinnon taking a lease of the territories north of that point. The story of the negotiations between Great Britain, Germany and France which led to this result is told elsewhere (see Africa, section 5). By the agreement of the 1st of July 1890, between the British and German governments, and by agreements concluded between Germany and Portugal in 1886 and 1894, and Germany and the Congo Free State in 1884 and later dates, the German sphere of influence attained its present area. On the 28th of October 1890 the sultan of Zanzibar ceded absolutely to Germany the mainland territories already leased to a German company, receiving as compensation £200,000.

While these negotiations were going on, various German companies had set to work to exploit the country, and on the 16th of August 1888 the German East African Company, the lessee of the Zanzibar mainland strip, took over the administration from the Arabs. This was followed, five days later, by a revolt of all the coast Arabs against German rule—the Germans, raw hands at the task of managing Orientals, having aroused intense hostility by their brusque treatment of the dispossessed rulers. The company being unable to quell the revolt, Captain Hermann Wissmann—subsequently Major Hermann von Wissmann (1853-1905)—was sent out by Prince Bismarck as imperial commissioner. Wissmann, with 1000 soldiers, chiefly Sudanese officered by Germans, and a German naval contingent, succeeded by the end of 1889 in crushing the power of the Arabs. Wissmann remained in the country until 1891 as commissioner, and later (1895-1896) was for eighteen months governor of the colony—as the German sphere had been constituted by proclamation (1st of January 1897). Towards the native population Wissmann's attitude was conciliatory, and under his rule the development of the resources of the country was pushed on. Equal success did not attend the efforts of other administrators; in 1891-1892 Karl Peters had great trouble with the tribes in the Kilimanjaro district and resorted to very harsh methods, such as the execution of women, to maintain his authority. In 1896 Peters was condemned by a disciplinary court for a misuse of official power, and lost his commission. After 1891, in which year the Wahehe tribe ambushed and almost completely annihilated a German military force of 350 men under Baron von Zelewski, there were for many years no serious risings against German authority, which by the end of 1898 had been established over almost the whole of the hinterland. The development of the country was, however, slow, due in part to the disinclination of the Reichstag to vote supplies sufficient for the building of railways to the fertile lake regions. Count von Götzen (governor 1901-1906) adopted the policy of maintaining the authority of native rulers as far as possible, but as over the greater part of the colony the natives have no political organizations of any size, the chief burden of government rests on the German authorities. In August 1905 serious disturbances broke out among the Bantu tribes in the colony. The revolt was due largely to resentment against the restrictions enforced by the Germans in their efforts at civilization, including compulsory work on European plantations in certain districts. Moreover, it is stated that the Herero in rebellion in German South-west Africa sent word to the east coast natives to follow their example, an instance of the growing solidarity of the black races of Africa. Though the revolt spread over a very large area, the chief centre of disturbance was the region between Nyasa and the coast at Kilwa and Lindi. Besides a number of settlers a Roman Catholic bishop and a party of four missionaries and nuns were murdered in the Kilwa hinterland, while nearer Nyasa the warlike Wangoni held possession of the country. The Germans raised levies of Masai and Sudanese, and brought natives from New Guinea to help in suppressing the rising, besides sending naval and military contingents from Germany. In general, the natives, when encountered, were easily dispersed, but it was not until March 1906 that the coast regions were again quiet. In July following the Wangoni were beaten in a decisive engagement. It was officially stated that the death-roll for the whole war was not below 120,000 men, women and children. In 1907 a visit was paid to the colony by Herr B. Dernburg, the colonial secretary. As a result of this visit more humane methods in the treatment of the natives were introduced, and measures taken to develop more fully the economic resources of the country.

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(F. R. C.)

GERMAN EVANGELICAL SYNOD OF NORTH AMERICA, a Protestant church dating from October 1840, and known, in its early years, as the German Evangelical Association of the West. It was formed by six German ministers who had been ordained in Prussia and were engaged in missionary and pioneer work in Missouri and Illinois. The original organization was strengthened in 1858 by amalgamation with the German Evangelical Church Association of Ohio, and later by the inclusion of the German United Evangelical Synod of the East (1860), the Evangelical Synod of the North-West (1872) and the United Evangelical Synod of the East (1872). The church bases its position on the Bible as interpreted by the symbols of the Lutheran and Reformed churches so far as they are in agreement, points of difference being left to "that liberty of conscience which, as a component part of the basis of man's ultimate responsibility to God himself, is the inalienable privilege of every believer." The church, which has (1909) 985 ministers and some 238,000 communicant members, is divided into seventeen districts, with officers responsible to the General Synod, which meets every four years. There are boards for home and foreign missions, the latter operating chiefly in the Central Provinces of India. The literature of the church is mainly in German, though English is rapidly gaining ground.

GERMANIC LAWS, EARLY. Of those Germanic laws of the early middle ages which are known as *leges barbarorum*, we here deal with the principal examples other than Frankish, viz. (1) *Leges Wisigothorum*, (2) *Lex Burgundionum*, (3) *Pactus Alamannorum* and *Lex Alamannorum*, (4) *Lex Bajuvariorum*, (5) *Lex Saxonum*, (6) *Lex Frisionum*, (7) *Lex Angliorum et Werinorum, hoc est, Thuringorum*, and (8) *Leges Langobardorum*. All these laws may in general be described as codes of procedure and tariffs of compositions. They present somewhat similar features with the Salic law, but often differ from it in the date of compilation, the amount of fines, the number and nature of the crimes, the number, rank, duties and titles of the officers, &c. For the Salic law and other Frankish laws, see SALIC LAW, and for the edict of Theodoric I., which was applicable to the Ostrogoths and Romans, see ROMAN LAW.

For the whole body of the Germanic laws see P. Canciani, *Barbarorum leges antiquae* (Venice, 1781-1789); F. Walter, *Corpus juris germanici antiqui* (Berlin, 1824); *Monumenta Germaniae historica, Leges*. For further information on the codes in general, see H.M. Zöpfl, *Deutsche Rechtsgeschichte* (4th ed., Heidelberg, 1871-1876); J.E.O. Stobbe, *Geschichte der deutschen Rechtsquellen* (Brunswick, 1860-1864); Paul Viollet, *Histoire du droit civil français* (2nd ed., Paris, 1893); H. Brunner, *Deutsche Rechtsgeschichte* (2nd ed., Leipzig, 1906).

1. *Leges Wisigothorum*.—Karl Zeumer's edition of these laws in the 4to series of the *Mon. Germ. Hist.* throws new light on all questions relating to their date and composition. It is now certain that the earliest written code of the Visigoths dates back to King Euric (466-485). Besides his own constitutions, Euric included in this collection constitutions of his predecessors, Theodoric I. (419-451), Thorismund (451-453), and Theodoric II. (453-466), and he arranged the whole in a logical order. Of this code fragments of chapters cclxxvi. to cccxxxvi.[1] have been discovered in a palimpsest MS. in the Bibliothèque Nationale at Paris (Latin coll., No. 12161), a fact which proves that the code ran over a large area. Euric's code was used for all cases between Goths, and between them and Romans; in cases between Romans, Roman law was used. At the instance of Euric's son, Alaric II., an examination was made of the Roman laws in use among Romans in his dominions, and the resulting compilation was approved in 506 at an assembly at Aire, in Gascony, and is known as the Breviary of Alaric, and sometimes as the *Liber Aniani*, from the fact that the authentic copies bear the signature of the *referendarius* Anian.

Euric's code remained in force among the Visigoths of Spain until the reign of Leovigild (568-586), who made a new one, improving upon that of his predecessor. This work is lost, and we have no direct knowledge of any fragment of it. In the 3rd codification, however, many provisions have been taken from the 2nd, and these are designated by the word "*antiqua*"; by means of these "*antiqua*" we are enabled in a certain measure to reconstruct the work of Leovigild.

After the reign of Leovigild the legislation of the Visigoths underwent a transformation. The new laws made by the kings were declared to be applicable to all the subjects in the kingdom, of whatever race—in other words, they became territorial; and this principle of territoriality was gradually extended to the ancient code. Moreover, the conversion of Reccared I. (586-601) to orthodoxy effaced the religious differences among his subjects, and all subjects, *qua* Christians, had to submit to the canons of the councils, which were made obligatory by the

kings. After this change had been accepted, Recceswinth (649-672) made a new code, which was applicable to Visigoths and Romans alike. This code, known as the *Liber judiciorum*, is divided into 12 books, which are subdivided into *tituli* and chapters (*aerae*). It comprises 324 constitutions taken from Leovigild's collection, a few of the laws of Reccared and Sisebut, 99 laws of Chindaswinth (642-653), and 87 of Recceswinth. A recension of this code of Recceswinth was made in 681 by King Erwig (680-687), and is known as the *Lex Wisigothorum renovata*; and, finally, some additamenta were made by Egica (687-702). In Zeumer's edition of the *Leges Wisigothorum* the versions of Recceswinth and Erwig, where they differ from each other, are shown in parallel columns, and the laws later than Erwig are denoted by the sign "*nov*."

For further information see the preface to Zeumer's edition; H. Brunner, *Deutsche Rechtsgeschichte* (2nd ed., Leipzig, 1906); Ureña y Smenyaud, *La Legislacion Gotico-hispana* (Madrid, 1905).

2. *Lex Burgundionum*.—This code was compiled by King Gundobald (474-516), very probably after his defeat by Clovis in 500. Some additamenta were subsequently introduced either by Gundobald himself or by his son Sigismund. This law bears the title of *Liber Constitutionum*, which shows that it emanated from the king; it is also known as the *Lex Gundobada* or *Lex Gombata*. It was used for cases between Burgundians, but was also applicable to cases between Burgundians and Romans. For cases between Romans, however, Gundobald compiled the *Lex Romana Burgundionum*, called sometimes, through a misreading of the MSS., the *Liber Papiani* or simply *Papianus*. The barbarian law of the Burgundians shows strong traces of Roman influence. It recognizes the will and attaches great importance to written deeds, but on the other hand sanctions the judicial duel and the *cojuratores* (sworn witnesses). The vehement protest made in the 9th century by Agobard, bishop of Lyons, against the *Lex Gundobada* shows that it was still in use at that period. So late as the 10th and even the 11th centuries we find the law of the Burgundians invoked as personal law in Cluny charters, but doubtless these passages refer to accretions of local customs rather than to actual paragraphs of the ancient code.

The text of the *Lex Burgundionum* has been published by F. Bluhme in the *Mon. Germ. hist.*, *Leges*, iii. 525; by Karl Binding in the *Fontes rerum Bernensium* (vol. i., 1880); by J.E. Valentin Smith (Paris, 1889 seq.); and by von Salis (1892) in the 4to series of the *Mon. Germ. hist.* Cf. R. Dareste, "La Loi Gombette," in the *Journal des savants* (July 1891).

3. *Pactus Alamannorum* and *Lex Alamannorum*.—Of the laws of the Alamanni, who dwelt between the Rhine and the Lech, and spread over Alsace and what is now Switzerland to the south of Lake Constance, we possess two different texts. The earlier text, of which five short fragments have come down to us, is known as the *Pactus Alamannorum*, and from the persistent recurrence of the expression "et sic convenit" was most probably drawn up by an official commission. The reference to affranchisement *in ecclesia* shows that it was composed at a period subsequent to the conversion of the Alamanni to Christianity. There is no doubt that the text dates back to the reign of Dagobert I., *i.e.* to the first half of the 7th century. The later text, known as the *Lex Alamannorum*, dates from a period when Alamannia was independent under national dukes, but recognized the theoretical suzerainty of the Frankish kings. There seems no reason to doubt the St Gall MS., which states that the law had its origin in an agreement between the great Alamannic lords and Duke Landfrid, who ruled the duchy from 709 to 730.

The two texts have been published by J. Merkel in the *Mon. Germ. hist.*, *Leges*, iii., and by Karl Lehmann in the 4to series of the same collection.

4. *Lex Bajuvariorum*.—We possess an important law of the Bavarians, whose duchy was situated in the region east of the Lech, and was an outpost of Germany against the Huns, known later as Avars. Parts of this law have been taken directly from the Visigothic law of Euric and from the law of the Alamanni. The Bavarian law, therefore, is later than that of the Alamanni. It dates unquestionably from a period when the Frankish authority was very strong in Bavaria, when the dukes were vassals of the Frankish kings. Immediately after the revolt of Bavaria in 743 the Bavarian duke Odilo was forced to submit to Pippin and Carloman, the sons of Charles Martel, and to recognize the Frankish suzerainty. About the same period, too, the church of Bavaria was organized by St Boniface, and the country divided into several bishoprics; and we find frequent references to these bishops (in the plural) in the law of the Bavarians. On the other hand, we know that the law is anterior to the reign of Duke Tassilo III. (749-788). The date of compilation must, therefore, be placed between 743 and 749.

There is an edition of the *Lex Bajuvariorum* by J. Merkel in the *Mon. Germ. hist.*, *Leges*, iii. 183, and another was undertaken by E. von Schwind for the 4to series of the same collection. Cf. von Schwind's article in the *Neues Archiv*, vol. xxxi.

5. *Lex Saxonum*.—Germany comprised two other duchies, Saxony and Frisia, of each of which we possess a text of law. The *Lex Saxonum* has come down to us in two MSS. and two old editions (those of B.J. Herold and du Tillet), and the text has been edited by Karl von Richthofen in the *Mon. Germ. hist.*, *Leges*, v. The law contains ancient customary enactments of Saxony, and, in the form in which it has reached us, is later than the conquest of Saxony by Charlemagne. It is preceded by two capitularies of Charlemagne for Saxony—the *Capitulatio de partibus Saxoniae* (A. Boretius i. 68), which dates undoubtedly from 782, and is characterized by great severity, death being the penalty for every offence against the Christian religion; and the *Capitulare Saxonicum* (A. Boretius i. 71), of the 28th of October 797, in which Charlemagne shows less brutality and pronounces simple compositions for misdeeds which formerly entailed death. The *Lex Saxonum* apparently dates from 803, since it contains provisions which are in the *Capitulare legi Ribuariae additum* of that year. The law established the ancient customs, at the same time eliminating anything that was contrary to the spirit of Christianity; it proclaimed the peace of the churches, whose possessions it guaranteed and whose right of asylum it recognized.

6. *Lex Frisionum*.—This consists of a medley of documents of the most heterogeneous character. Some of its enactments are purely pagan—thus one paragraph allows the mother to kill her new-born child, and another prescribes the immolation to the gods of the defiler of their temple; others are purely Christian, such as those which prohibit incestuous marriages and working on Sunday. The law abounds in contradictions and repetitions, and the compositions are calculated in different moneys. From this it would appear that the documents were merely materials collected from various sources and possibly with a view to the compilation of a homogeneous law. These materials were apparently brought together at the beginning of the 9th century, at a time of intense legislative activity at the court of Charlemagne.

There are no MSS. of the document extant; our knowledge of it is based upon B.J. Herold's edition (*Originum ac Germanicarum antiquitatum libri*, Basel, 1557), which has been reproduced by Karl von Richthofen in the *Mon. Germ. hist.*, *Leges*, iii. 631.

7. *Lex Angliorum el Werinorum, hoc est, Thuringorum*.—In early times there dwelt in Thuringia, south of the river Unstrut, the Angli, who gave their name to the *pagus Engili*, and to the east, between the Saale and the Elster, the Warni (Werini, or Varini), whose name is seen in Werenofeld. In the 9th century, however, this region (then called Werenofeld) was occupied by the Sorabi, and the Warni and Angli either coalesced with the Thuringi or sought an asylum in the north of Germany. A collection of laws has come down to us bearing the name of these two peoples, the *Lex Angliorum et Werinorum, hoc est, Thuringorum*. This text is a collection of local customs arranged in the same order as the law of the Ripuarians. Parts of it are based on the *Capitulare legi Ribuariae additum* of 803, and it seems to have been drawn up in the same conditions and circumstances as the law of the Saxons. There is an edition of this code by Karl von Richthofen in the *Mon. Germ. hist.*, *Leges*, v. 103. The old opinion that the law originated in south Holland is entirely without foundation.

8. *Leges Langobardorum*.—We possess a fair amount of information on the origin of the last barbarian code, the laws of the Lombards. The first part, consisting of 388 chapters, is known as the *Edictus Langobardorum*, and was promulgated by King Rothar at a diet held at Pavia on the 22nd of November 643. This work, composed at one time and arranged on a systematic plan, is very remarkable. The compilers knew Roman law, but drew upon it only for their method of presentation and for their terminology; and the document presents Germanic law in its purity. Rothar's edict was augmented by his successors; Grimoald (668) added nine chapters; Liutprand (713-735), fifteen volumes, containing a great number of ecclesiastical enactments; Ratchis (746), eight chapters; and Aistulf (755), thirteen chapters. After the union of the Lombards to the Frankish kingdom, the capitularies made for the entire kingdom were applicable to Italy. There were also special capitularies for Italy, called *Capitula Italica*, some of which were appended to the edict of Rothar.

At an early date compilations were formed in Italy for the use of legal practitioners and jurists. Eberhard, duke and margrave of Rhaetia and Friuli, arranged the contents of the edict with its successive additamenta into a *Concordia de singulis causis* (829-832). In the 10th century a collection was made of the capitularies in use in Italy, and this was known as the *Capitulare Langobardorum*. Then appeared, under the influence of the school of law at Pavia, the *Liber legis Langobardorum*, also called *Liber Papiensis* (beginning of 11th century), and the *Lombarda* (end of 11th century) in two forms—that given in a Monte Cassino MS. and known as the *Lombarda Casinensis*, and the *Lombarda Vulgata*.

There are editions of the *Edictus*, the *Concordia*, and the *Liber Papiensis* by F. Bluhme and A. Boretius in the *Mon. Germ. hist., Leges*, iv. Bluhme also gives the rubrics of the *Lombardae*, which were published by F. Lindenberg in his *Codex legum antiquarum* in 1613. For further

information on the laws of the Lombards see J. Merkel, *Geschichte des Langobardenrechts* (1850); A. Boretius, *Die Kapitularien im Langobardenreich* (1864); and C. Kier, *Edictus Rotari* (Copenhagen, 1898). Cf. R. Dareste in the *Nouvelle Revue historique de droit français et étranger* (1900, p. 143).

(C. Pf.)

1 The lacunae in these fragments have been filled in by the aid of the law of the Bavarians, where the chief provisions are reproduced.

GERMANICUS CAESAR (15 B.C.-A.D. 19), a Roman general and provincial governor in the reign of Tiberius. The name Germanicus, the only one by which he is known in history, he inherited from his father, Nero Claudius Drusus, the famous general, brother of Tiberius and stepson of Augustus. His mother was the younger Antonia, daughter of Marcus Antonius and niece of Augustus, and he married Agrippina, the granddaughter of the same emperor. It was natural, therefore, that he should be regarded as a candidate for the purple. Augustus, it would seem, long hesitated whether he should name him as his successor, and as a compromise required his uncle Tiberius to adopt him, though Tiberius had a son of his own. Of his early years and education little is known. That he possessed considerable literary abilities, and that these were carefully trained, we gather, both from the speeches which Tacitus puts into his mouth, and from the reputation he left as an orator, as attested by Suetonius and Ovid, and from the extant fragments of his works.

At the age of twenty he served his apprenticeship as a soldier under Tiberius, and was rewarded with the triumphal insignia for his services in crushing the revolt in Dalmatia and Pannonia. In A.D. 11 he accompanied Tiberius in his campaign on the Rhine, undertaken, in consequence of the defeat of Varus, with the object of securing the German frontier. In 12 he was made consul, and increased his popularity by appearing as an advocate in the courts of justice, and by the celebration of brilliant games. Soon afterwards he was appointed by Augustus to the important command of the eight legions on the Rhine. The news of the emperor's death (14) found Germanicus at Lugdunum (Lyons), where he was superintending the census of Gaul. Close upon this came the report that a mutiny had broken out among his legions on the lower Rhine. Germanicus hurried back to the camp, which was now in open insurrection. The tumult was with difficulty quelled, partly by well-timed concessions, for which the authority of the emperor was forged, but chiefly owing to his personal popularity. Some of the insurgents actually proposed that he should put himself at their head and secure the empire for himself, but their offer was rejected with indignation. In order to calm the excitement Germanicus determined at once on an active campaign. Crossing the Rhine, he attacked and routed the Marsi, and laid waste the valley of the Ems. In the following year he 777
marched against Arminius, the conqueror of Varus, and performed the last rites over the remains of the Roman soldiers that still lay there unburied, erecting a barrow to mark the spot. Arminius, however, favoured by the marshy ground, was able to hold his own, and it required another campaign before he was finally defeated. A masterly combined movement by land and water enabled Germanicus to concentrate his forces against the main body of the Germans encamped on the Weser, and to crush them in two obstinately contested battles. A monument erected on the field proclaimed that the army of Tiberius had conquered every tribe between the Rhine and the Elbe. Great, however, as the success of the Roman arms had been, it was not such as to justify this boastful inscription; we read of renewed attacks from the barbarians, and plans of a fourth campaign for the next summer.

But the success of Germanicus had already stirred the jealousy and fears of Tiberius, and he was reluctantly compelled to return to Rome. On the 26th of May 17 he celebrated a triumph. The enthusiasm with which he was welcomed, not only by the populace, but by the emperor's own praetorians, was so great that the earliest pretext was seized to remove him from the capital. He was sent to the East with extraordinary powers to settle a disputed succession in Parthia and Armenia. At the same time Gnaeus Calpurnius Piso, one of the most violent and ambitious of the old nobility, was sent as governor of Syria to watch his movements. Germanicus proceeded by easy stages to his province, halting on his way in Dalmatia, and visiting the battlefield of Actium, Athens, Ilium, and other places of historic interest. At Rhodes he met his coadjutor Piso, who was seeking everywhere to thwart and malign him. When at last he reached his destination, he found little difficulty in effecting the settlement of the disturbed provinces, notwithstanding Piso's violent and persistent opposition. At Artaxata Zeno, the popular candidate for the throne, was crowned king of Armenia. To the provinces of

Cappadocia and Commagene Roman governors were assigned; Parthia was conciliated by the banishment of the dethroned king Vonones.

After wintering in Syria Germanicus started for a tour in Egypt. The chief motive for his journey was love of travel and antiquarian study, and it seems never to have occurred to him, till he was warned by Tiberius, that he was thereby transgressing an unwritten law which forbade any Roman of rank to set foot in Egypt without express permission. On his return to Syria he found that all his arrangements had been upset by Piso. Violent recriminations followed, the result of which, it would seem, was a promise on the part of Piso to quit the province. But at this juncture Germanicus was suddenly attacked at Epidaphne near Antioch by a violent illness, which he himself and his friends attributed to poison administered by Plancina, the wife of Piso, at the instigation of Tiberius. Whether these suspicions were true is open to question; it seems more probable that his death was due to natural causes. His ashes were brought to Rome in the following year (20) by his wife Agrippina, and deposited in the grave of Augustus. He had nine children, six of whom, three sons and three daughters, survived him, amongst them the future emperor Gaius and the notorious Agrippina, the mother of Nero. The news of his death cast a gloom over the whole empire. Nor was Germanicus unworthy of this passionate devotion. He had wiped out a great national disgrace; he had quelled the most formidable foe of Rome. His private life had been stainless, and he possessed a singularly attractive personality. Yet there were elements of weakness in his character which his short life only half revealed: an impetuosity which made him twice threaten to take his own life; a superstitious vein which impelled him to consult oracles and shrink from bad omens; an amiable dilettantism which led him to travel in Egypt while his enemy was plotting his ruin; a want of nerve and resolution which prevented him from coming to an open rupture with Piso till it was too late.

He possessed considerable literary abilities; his speeches and Greek comedies were highly spoken of by his contemporaries. But the only specimen of his work that has come down to us is the translation in Latin hexameters (generally attributed to him, although some consider Domitian the author), together with scholia, of the *Phaenomena* of Aratus, which is superior to those of Cicero and Avienus (best edition by A. Breysig, 1867; 1899, without the scholia). A few extant Greek and Latin epigrams also bear the name Germanicus.

In addition to monographs by A. Zingerle (Trent, 1867) and A. Breysig (Erfurt, 1892), there are treatises on the German campaigns by E. von Wietersheim (1850), P. Höfer (1884), F. Knoke (1887, 1889), W. Fricke (1889), A. Taramelli (1891), Dahm (1902).

See Tacitus, *Annals*, i.-iv. (ed. Furneaux); Suetonius, *Augustus, Tiberius*; J.C. Tarver, *Tiberius* (1902); Merivale, *Hist. of the Romans under the Empire*, chs. 42, 43; H. Schiller, *Geschichte der römischen Kaiserzeit*, i. 1 (1883), pp. 227, 258, 261-266, 270-276; M. Schanz, *Geschichte der römischen Litteratur*, pt. ii. (2nd ed., 1901), and Teuffel-Schwabe, *Hist. of Roman Literature* (Eng. tr., 1900), 275.

GERMANIUM (symbol Ge, atomic weight 72.5); one of the metallic elements included in the same natural family as carbon, silicon, tin and lead. It was discovered in 1886 by C. Winkler in argyrodite, a mineral found at Freiberg in Saxony. On examination of the metal and its salts it was shown to be identical with the hypothetical element *ekasilicon*, whose properties had been predicted by D. Mendeléeff many years previously. The element is of extremely rare occurrence, being met with only in argyrodite and, to a very small extent, in euxenite. It may be obtained from argyrodite by heating the mineral in a current of hydrogen; or by heating the dioxide to redness with carbon. It forms grey coloured octahedra of specific gravity 5.496 at 20° C., melting at 900° C.; it burns at a red heat, is insoluble in hydrochloric acid, but dissolves in *aqua regia*, and is also soluble in molten alkalis. Two oxides of germanium are known, the *dioxide*, GeO_2, being obtained by roasting the sulphide and treatment with nitric acid. It is a white powder, very slightly soluble in water, and possesses acid properties. By heating with a small quantity of magnesium it is converted into *germanious oxide*, GeO. By heating the metal with chlorine, *germanic chloride*, $GeCl_4$, is obtained as a colourless fuming liquid boiling at 86-87° C., it is decomposed by water forming a hydrated germanium dioxide. *Germanium dichloride*, $GeCl_2$, and *germanium chloroform*, $GeHCl_3$, have also been described.

Germanium compounds on fusion with alkaline carbonates and sulphur form salts known as *thiogermanates*. If excess of a mineral acid be added to a solution of an alkaline thiogermanate a white precipitate of *germanium disulphide*, GeS_2, is obtained. It can also be obtained by passing sulphuretted hydrogen through a solution of the dioxide in hydrochloric acid. It is

appreciably soluble in water, and also in solutions of the caustic alkalis and alkaline sulphides. By heating the disulphide in a current of hydrogen, *germanious sulphide*, GeS, is formed. It sublimes in thin plates of a dark colour and metallic lustre, and is soluble in solutions of the caustic alkalis. Alkyl compounds of germanium such as *germanium tetra-ethyl*, $Ge(C_2H_5)_4$, a liquid boiling at 160° C., have been obtained. The germanium salts are most readily recognized by the white precipitate of the disulphide, formed in acid solutions, on passing sulphuretted hydrogen. The atomic weight of the element was determined by C. Winkler by analysis of the pure chloride $GeCl_4$, the value obtained being 72.32, whilst Lecoq de Boisbaudran (*Comptes rendus*, 1886, 103, 452), by a comparison of the lines in the spark spectrum of the element, deduced the value 72.3.

GERMAN LANGUAGE. Together with English and Frisian, the German language forms part of the West Germanic group of languages. To this group belongs also Langobardian, a dialect which died out in the 9th or 10th century, while Burgundian, traces of which are not met with later than the 5th century, is usually classed with the East Germanic group. Both these tongues were at an early stage crushed out by Romance dialects, a fate which also overtook the idiom of the Western Franks, who, in the so-called *Strassburg Oaths*[1] of 842, use the Romance tongue, and are addressed in that tongue by Louis the German.

Leaving English and Frisian aside, we understand by *Deutsche Sprache* the language of 778
those West Germanic tribes, who, at their earliest appearance in history, spoke a Germanic tongue, and still speak it at the present day. The chief of these tribes are: the Saxons, the Franks (but with the restriction noted above), the Chatti (Hessians), Thuringians, Alemannians and Bavarians. This definition naturally includes the languages spoken in the Low Countries, Flemish and Dutch, which are offsprings of the Low Franconian dialect, mixed with Frisian and Saxon elements; but, as the literary development of these languages has been in its later stages entirely independent of that of the German language, they are excluded from the present survey.

The German language, which is spoken by about seventy-one millions, and consequently occupies in this respect the third place among European languages, borders, in the west and south, on Romance languages (French, Italian), and also to some extent on Slavonic. On Italian and Slovenian territory there are several German-speaking “islands,” notably the Sette and Tredici Communi, east and north-east of the Lake of Garda, and the “Gottschee Ländchen” to the south of Laibach. The former of these is, however, on the point of dying out. Neighbours on the east, where the boundary line runs by no means as straight as on the west or south, are the Magyars and again Slavonic races. Here, too, there are numerous “islands” on Hungarian and Slavonic territory. Danes and Frisians join hands with the Germans in the north.[2]

In the west and south the German language has, compared with its status in earlier periods, undoubtedly lost ground, having been encroached upon by Romance tongues. This is the case in French Flanders, in Alsace and Lorraine, at any rate before the war of 1870, in the valleys south of Monte Rosa and in southern Tirol; in Styria and Carinthia the encroachment is less marked, but quite perceptible. On the east, on the other hand, German steadily spread from the days of Charles the Great down to recent times, when it has again lost considerable ground in Bohemia, Moravia and Livonia. At the time of Charles the Great the eastern frontier extended very little beyond the lower Elbe, following this river beyond Magdeburg, whence it passed over to the Saale, the Bohemian forest and the river Enns (cf. the map in F. Dahn, *Urgeschichte der germanischen und romanischen Völker*, vol. iii.). Partly as a result of victories gained by the Germans over the Avars and Slavs, partly owing to peaceful colonization, the eastern boundary was pushed forward in subsequent centuries; Bohemia was in this way won for the German tongue by German colonists in the 13th century, Silesia even a little earlier; in Livonia German gained the upper hand during the 13th century, while about the same time the country of the Prussians was conquered and colonized by the knights of the Teutonic order. The dialect which these colonists and knights introduced bore the Middle German character; and this, in various modifications, combined with Low German and even Dutch elements, formed the German spoken in these newly-won territories. In the north (Schleswig), where at the time of Charles the Great the river Eider formed the linguistic boundary, German has gained and is still gaining on Danish.

Before considering the development of the language spoken within these boundaries, a word of explanation is perhaps necessary with regard to the word *deutsch*. As applied to the language, *deutsch* first appears in the Latin form *theotiscus*, *lingua theotisca*, *teutisca*, in

certain Latin writings of the 8th and 9th centuries, whereas the original Old High German word *thiudisc*, *tiutisc* (from *thiot*, *diot*, "people," and the suffix *-isc*) signified only "appertaining to the people," "in the manner of the people." Cf. also Gothic *þiudisko* as a translation of ἐθνικῶς (Gal. ii. 14). It, therefore, seems probable that if the application of the word to the language (*lingua theotisca*) was not exactly an invention of Latin authors of German nationality, its use in this sense was at least encouraged by them in order to distinguish their own vernacular (*lingua vulgaris*) from Latin as well as from the *lingua romana*.[3]

In the 8th and 9th centuries German or "Deutsch" first appears as a written language in the dialects of Old High German and Old Low German. Of an "Urdeutsch" or primitive German, *i.e.* the common language from which these sharply distinguished dialects of the earliest historical period must have developed, we have no record; we can only infer its character—and it was itself certainly not free from dialectic variations—by a study of the above-named and other Germanic dialects. It is usual to divide the history of the German language from this earliest period, when it appears only in the form of proper names and isolated words as glosses to a Latin text, down to the present day, into three great sections: (1) Old High German (*Althochdeutsch*) and Old Low German (Old Saxon; *Altniederdeutsch*, *Altsächsisch*); (2) Middle High German (*Mittelhochdeutsch*) and Middle Low German (Mittelniederdeutsch); and (3) Modern High German and Modern Low German (*Neuhochdeutsch* and *Neuniederdeutsch*). It is more difficult to determine the duration of the different periods, for it is obvious that the transition from one stage of a language to another takes place slowly and gradually.

The first or Old High German period is commonly regarded as extending to about the year 1100. The principal characteristic of the change from Old High German to Middle High German is the weakening of the unaccented vowels in final syllables (cf. O.H.G. *tagā*, *gesti*, *geban*, *gābum* and M.H.G. *tage*, *geste*, *geben*, *gāben*). But it must be remembered that this process began tentatively as early as the 10th century in Low German, and also that long, unaccented vowels are preserved in the Alemannic dialect as late as the 14th century and even later. Opinion is more at variance with regard to the division between the second and third periods. Some would date Modern High German from the time of Luther, that is to say, from about 1500. But it must be noted that certain characteristics attributed to the Modern German vowel system, such as lengthening of Middle High German short vowels, the change from Middle High German *ī*, *ū*, *iu* to Modern High German *ei*, *au*, *eu* (*öu*), of Middle High German *ie*, *uo*, *üe* to Modern High German *ī*, *ū*, *ǖ*, made their appearance long before 1500. Taking this fact into consideration, others distinguish a period of classical Middle High German extending to about 1250, and a period of transition (sometimes called *Frühneuhochdeutsch*, or Early Modern High German) from 1250 to 1650. The principal characteristics of Modern High German would then consist in a greater stability of the grammatical and syntactical rules, due to the efforts of earlier grammarians, such as Schottelius, Gottsched and others, and the substitution of a single vowel sound for the varying vowels of the singular and plural of the preterite of strong verbs (cf. Middle High German *schreib*, *schriben*, and Modern High German *schrieb*, *schrieben*, &c.). The much debated question of the origins of Modern High German has been recently reopened by O. Behaghel (*Geschichte der deutschen Sprache, l.c.* 661), who hopes that a more satisfactory solution may be arrived at by the study of certain syntactical peculiarities to be seen in the dialects of more recent periods.

As the middle ages did not produce a German *Schriftsprache* or literary language in the modern sense of the word, which—as is undoubtedly the case in Modern German—might have influenced the spoken language (*Umgangssprache*), the history of the language in its earlier stages is a history of different dialects. These dialects will, therefore, claim our attention at some length.

It may be assumed that the languages of the different West Germanic tribes enumerated above were, before the appearance of the tribes in history, distinguished by many dialectic variations; this was certainly the case immediately after the Migrations, when the various races began to settle down. But these differences, consisting presumably in matters of phonology and vocabulary, were nowhere so pronounced as to exclude a mutual understanding of individuals belonging to different tribes. One might compare the case of the Poles and Czechs of the present day. During the 6th century, however, a phonological process set in, which ultimately resulted in the separation of Germany into two great linguistic divisions, south and north, or, as the languages are called, High and Low German. This fundamental change, which is known as the second or High German Soundshifting (*Lautverschiebung*), spread northward from the mountainous districts in the south, and, whatever its cause may have been,[4] left behind it clear and easily recognizable effects on the Germanic voiced stop *d*, which became changed to *t*, and more especially on the voiceless stops *t*, *p* and *k*. Dialects which have shifted initial *t* and *tt* in the middle of a word to the affricate *tz* (written *z*, *tz*) and *p* and *k* in corresponding positions to the affricates *pf* and *kχ* (written *ch*), further, *t*, *p* and *k* in the middle of words between vowels, to the double spirant *zz* (now written *ss*, *sz*), *ff*, *hh*

(written *ch*), are called High German; those in which these changes have not taken place form the Low German group, this group agreeing in this respect with English and Frisian.

Of these sound changes, that of *t* to *tz* and *zz* (*ss*) is the most universal, extending over the whole region in which shifting occurs; that of *k* to *kχ* (*ch*), the most restricted, being only found in Old Bavarian, and in the Swiss pronunciation, *e.g.* in *chind*. The remaining dialects occupy positions between the two extremes of complete shifting and the absence of shifting. Some Franconian dialects, for instance, leave *p* unchanged under certain conditions, and in one dialect at least, Middle Franconian, *t* has remained after vowels in certain pronominal forms (*dat*, *wat*, *allet*, &c.). On this ground a subdivision has been made in the High German dialects into (*a*) an Upper German (*Oberdeutsch*) and (*b*) a Middle German (*Mitteldeutsch*) group; and this subdivision practically holds good for all periods of the language, although in Old High German times the Middle German group is only represented, as far as the written language is concerned, by Franconian dialects.

As the scientific study of the German language advanced there arose a keen revival of interest—and that not merely on the part of scholars—in the dialects which were so long held in contempt as a mere corruption of the *Schriftsprache*.[5] We are still in the midst of a movement which, under the guidance of scholars, has, during the last three decades, bestowed great care on many of the existing dialects; phonological questions have received most attention, but problems of syntax have also not been neglected. Monumental works like Wenker's *Sprachatlas des deutschen Reiches* and dialect dictionaries are either in course of publication or preparing;[6] while the difficult questions concerned with defining the boundaries of the various dialects and explaining the reasons for them form the subject of many monographs.[7]

Beginning in the north we shall now pass briefly in review the dialects spoken throughout the German-speaking area.

A. The Low German Dialects

The Low German dialects, as we have seen, stand nearest to the English and Frisian languages, owing to the total absence of the consonantal shifting which characterizes High German, as well as to other peculiarities of sounds and inflections, *e.g.* the loss of the nasals *m* and *n* before the spirants *f*, *s* and *p*. Cf. Old Saxon *fif* (five), *us* (us), *kup* (cf. uncouth). The boundary-line between Low and High German, the so-called *Benrather Linie*, may roughly be indicated by the following place-names, on the understanding, however, that the Ripuarian dialect (see below) is to be classed with High German: Montjoie (French border-town), Eupen, Aachen, Benrath, Düsseldorf, north of Siegen, Cassel, Heiligenstadt, Harzgerode, to the Elbe south of Magdeburg; this river forms the boundary as far as Wittenberg, whence the line passes to Lübben on the Spree, Fürstenwald on the Oder and Birnbaum near the river Warthe. Beyond this point the Low Germans have Slavs as their neighbours. Compared with the conditions in the 13th century, it appears that Low German has lost ground; down to the 14th and 15th centuries several towns, such as Mansfeld, Eisleben, Merseburg, Halle, Dessau and Wittenberg, spoke Low German.

Low German falls into two divisions, a western division, namely, Low Franconian, the parent, as we have already said, of Flemish and Dutch, and an eastern division, Low Saxon (*Plattdeutsch*, or, as it is often simply called, Low German). The chief characteristic of the division is to be sought in the ending of the first and third person plural of the present indicative of verbs, this being in the former case *-en*, in the latter *-et*. Inasmuch as the south-eastern part of Low Franconian—inclusive of Gelderland and Cleves—shifts final *k* to *ch* (*e.g.* *ich*, *mich*, *auch*, *-lich*), it must obviously be separated from the rest, and in this respect be grouped with High German. Low Saxon is usually divided into Westphalian (to the west of the Weser) and Low Saxon proper, between Weser and Elbe. The south-eastern part of the latter has the verbal ending *-en* and further shows the peculiarity that the personal pronoun has the same form in the dative and accusative (*mik*, *dick*), whereas the remainder, as well as the Westphalian, has *mi*, *di* in the dative, and *mi*, *di* or *mik*, *dik* in the accusative. To these Low German dialects must also be added those spoken east of the Elbe on what was originally Slavonic territory; they have the ending *-en* in the first and third person plural of verbs.[8]

B. The High German Dialects

1. *The Middle German Group.*—This group, which comprises the dialects of the Middle Rhine, of Hesse, Thuringia, Upper Saxony (Meissen), Silesia and East Prussia to the east of the lower Vistula between Bischofswerder, Marienburg, Elbing, Wormditt and Wartenberg—a district originally colonized from Silesia—may be most conveniently divided into an East and a West Middle German group. A common characteristic of all these dialects is the diminutive suffix *-chen*, as compared with the Low German form *-ken* and the Upper German *-lein* (O.H.G. *līn*).

East Middle German consists of Silesian, Upper Saxon and Thuringian,[9] together with the linguistic colony in East Prussia. While these dialects have shifted initial Germanic *p* to *ph*, or even to *f* (*fert* = *Pferd*), the West Middle German dialects (roughly speaking to the west of the watershed of Werra and Fulda) have retained it. If, following a convincing article in the *Zeitschrift für deutsches Altertum* (37, 288 ff.) by F. Wrede, we class East and South Franconian—both together may be called High Franconian—with the Upper German dialects, there only remain in the West Middle German group:[10] (*a*) Middle Franconian and (*b*) Rhenish Franconian. The former of these,[11] which with its *dat*, *wat*, *allet*, &c. (cf. above) and its retention of the voiced spirant *b* (written *v*) represents a kind of transition dialect to Low German, is itself divided into (α) Ripuarian or Low Rhenish with Cologne and Aachen (Aix-la-Chapelle) as centres, and (β) Moselle Franconian[12] with Trier (Treves) as principal town. The latter is distinguished by the fact that in the Middle High German period it shifts Germanic *-rp-* and *-rd-*, which are retained in (*a*), to *-rf-* and *-rt-* (cf. *werfen*, *hirtin* with *werpen*, *hirdin*).[13] The Rhenish Franconian dialect is spoken in the Rhenish palatinate, in the northern part of Baden (Heidelberg), Hesse[14] and Nassau, and in the German-speaking part of Lorraine. A line drawn from Falkenberg at the French frontier to Siegen on the Lahn, touching the Rhine near Boppard, roughly indicates the division between Middle and Rhenish Franconian.

2. *The Upper German Group.*—The Upper German dialects, which played the most important part in the literature of the early periods, may be divided into (*a*) a Bavarian-Austrian group and (*b*) a High Franconian-Alemannic group. Of all the German dialects the Bavarian-Austrian has carried the soundshifting to its furthest extreme; here only do we find the labial voiced stop *b* written *p* in the middle of a word, viz. old Bavarian *kāpamēs*, old Alemannic *kābamēs* ("we gave"); here too, in the 12th century, we find the first traces of that broadening of *ī*, *ū*, *iu* (*ü*) to *ei*, *au*, *eu*, a change which, even at the present day, is still foreign to the greater part of the Alemannic dialects. Only in Bavarian do we still find the old pronominal dual forms *es* and *enk* (for *ihr* and *euch*). Finally, Bavarian forms diminutives in *-el* and *-erl* (*Mädel*, *Mäderl*), while the Franconian-Alemannic forms are *-la* and *-le* (*Mädle*). On the other hand, the pronunciation of *-s* as *-sch*, especially *-st* as *-scht* (cf. *Last*, *Haspel*, pronounced *Lascht*, *Haschpel*), may be mentioned as characteristic of the Alemannic, just as the *fortis* pronunciation of initial *t* is characteristic of High Franconian, while the other Franconian and Upper German dialects employ the *lenis*.

The Alemannic dialect which, roughly speaking, is separated from Bavarian by the Lech and borders on Italian territory in the south and on French in the west, is subdivided into: (*a*) Swabian, the dialect of the kingdom of Württemberg and the north-western part of Tirol (cf. H. Fischer, *Geographie der schwäbischen Mundart*, 1895); (*b*) High Alemannic (Swiss), including the German dialects of Switzerland, of the southern part of the Black Forest (the Basel-Breisgau dialect), and that of Vorarlberg; (*c*) Low Alemannic, comprising the dialects of Alsace and part of Baden (to the north of the Feldberg and south of Rastatt), also, at the present day, the town of Basel. Only Swabian has taken part in the change of *i* to *ei*, &c., mentioned above, while initial Germanic *k* has been shifted to *ch* (χ) only in High Alemannic (cf. *chalt*, *chind*, *chorn*, for *kalt*, *kind*, *korn*). The pronunciation of *ū* as *ǖ*, *ü* (*Hüs* for *Haus*) is peculiar to Alsatian.

The High Franconian dialects, that is to say, east and south (or south-Rhenish) Franconian, which are separated broadly speaking by the river Neckar, comprise the language spoken in a part of Baden, the dialects of the Main valley from Würzburg upwards to Bamberg, the dialect of Nuremberg and probably of the Vogtland (Plauen) and Egerland. During the older historical period the principal difference between East and South Franconian consisted in the fact that initial Germanic *d* was retained in the latter dialect, while East Franconian shifted it to *t*. Both, like Bavarian and Alemannic, shift initial German *p* to the affricate *pf*.

Finally, the Bavarian-Austrian dialect is spoken throughout the greater part of the kingdom of Bavaria (*i.e.* east of the Lech and a fine drawn from the point where the Lech joins the Danube to the sources of the rivers Elster and Mulde, this being the East Franconian border-line), in Austria, western Bohemia, and in the German linguistic "islands" embedded in Hungary, in Gottschee and the Sette and Tredici Communi (cf. above).[15]

The Old High German Period

The language spoken during the Old High German period, that is to say, down to about the year 1050, is remarkable for the fulness and richness of its vowel-sounds in word-stems as well as in inflections. Cf. *elilenti*, *Elend*; *luginari*, *Lügner*; *karkari*, *Kerker*; *menniskono slahta*, *Menschengeschlecht*; *herzono*, *Herzen* (gen. pl.); *furisto*, *vorderste*; *hartost*, (*am*) *härtesten*; *sibunzug*, *siebzig*; *ziohemes*, (*wir*) *ziehen*; *salbota*, (*er*) *salbte*; *gaworahtos*, (*du*) *wirktest*, &c. Of the consonantal changes which took place during this period that of the spirant th (preserved only in English) to d (*werthan*, *werdan*; *theob*, *deob*) deserves mention. It spread from Upper Germany, where it is noticeable as early as the 8th century to Middle and finally, in the 11th and 12th centuries, to Low Germany. Further, the initial *h* in *hl*, *hn*, *hr*, *hw* (cf. *hwer*, *wer*; *hreini*, *rein*; *hlahhan*, *lachen*) and *w* in *wr* (*wrecceo*, *Recke*) disappeared, this change also

starting in Upper Germany and spreading slowly north. The most important vowel-change is the so-called mutation (*Umlaut*),[16] that is to say, the qualitative change of a vowel (except *i*) in a stem-syllable, owing to the influence of an *i* or *j* in the following syllable. This process commenced in the north where it seems to have been already fully developed in Low German as early as the 8th century. It is to be found, it may be noted, in Anglo-Saxon, as early as the 6th century. It gradually worked its way southwards to Middle and Upper Germany where, however, certain consonants seem to have protected the stem syllable from the influence of *i* in a following syllable. Cf., for instance, Modern High German *drucken* and *drücken*; *glauben*, *kaufen*, *Haupt*, words which in Middle German dialects show mutation. Orthographically, however, this process is, during the first period, only to be seen in the change of *ă* to *e*; from the 10th century onwards there are, it is true, some traces of other changes, and vowels like *ū̆*, *ō*, *ou* must have already been affected, otherwise we could not account for the mutation of these vowels at a period when the cause of it, the *i* or *j*, no longer existed. A no less important change, for it helped to differentiate High from Low German, was that of Germanic $\bar{e}_2$ (a closed *ē*-sound) and ō diphthongs in Old High German, while they were retained in Old Low German. Cf. O.H.G. *hēr*, *hear*, *hiar*, O.L.G. *hēr*; O.H.G. *fuoz*, O.L.G. *fōt*. The final result was that in the 10th century ie (older forms, *ia*, *ea*) and *uo* (older *ua*, *oa* in Alemannic, *ua* in South Franconian) had asserted themselves throughout all the High German dialects. Again while in Old High German the older diphthongs *ai* and *au* were preserved as *ei* and *ou*, unless they happened to stand at the end of a word or were followed by certain consonants (*h*, *w*, *r* in the one case, and *h*, *r*, *l*, *n*, *th*, *d*, *t*, *z*, *s* in the other; cf. *zēh* from *zīhan*, *zōh* from *ziohan*, *verlôs*, &c.), the Old Low German shows throughout the monophthongs *ē* (in Middle Low German a closed sound) and *ō* (cf. O.L.G. *stēn*, *ōga*). These monophthongs are also to be heard in Rhenish Franconian, the greater part of East Franconian and the Upper Saxon and Silesian dialects of modern times (cf. *Stein*: *Steen* or *Stan*; *laufen*: *lofen* or *lopen*).

Of the dialects enumerated above, Bavarian and Alemannic, High and Rhenish Franconian as well as Old Saxon are more or less represented in the literature of the first period. But this literature, the chief monuments of which are Otfrid's *Evangelienbuch* (in South Franconian), the Old Saxon *Heliand* (a life of Christ in alliterative verse), the translation of Tatian's *Gospel Harmony* (East Franconian) and that of a theological tract by Bishop Isidore of Seville and of parts of the Bible (Rhenish Franconian), is almost exclusively theological and didactic in character. One is consequently inclined to attach more value to the scanty remains of the *Hildebrandslied* and some interesting and ancient charms. The didactic spirit again pervades the translations and commentaries of Notker of St Gall in the early part of the 11th century, as well as a paraphrase of the *Song of Songs* by an abbot Williram of Ebersberg a little later. Latin, however, reigned supreme throughout this period, it being the language of the charters, the lawbooks (there is nothing in Germany to compare with the laws of the Anglo-Saxons), of science, medicine, and even poetry. It is thus needless to say that there was no recognized literary language (*Schriftsprache*) during this period, nor even any attempt to form one; at most, we might speak of schools in the large monasteries, such as Reichenau, St Gall, Fulda, which contributed to the spread and acceptance of certain orthographical rules.

The Middle High German Period

The following are the chief changes in sounds and forms which mark the development of the language in the Middle High German period. The orthography of the MSS. reveals a much more extensive employment of mutation (*Umlaut*) than was the case in the first period; we find, for instance, as the mutation of *o*, *ö*, of *ō*, *œ*, *of ū*, *iu* (*ü*), of *uo*, *üe*, of *ou*, *öu*, and *eu* (cf. *höler*, *bœse*, *hiuser*, *güete*, *böume*), although many scribes, and more especially those of Middle and Low German districts, have no special signs for the mutation of *ŭ*, *ū*, and *o*. Of special interest is the so-called "later (or weaker) mutation" (*jüngerer oder schwächerer Umlaut*) of *ă* to a very open *e* sound, which is often written *ä*. Cf. *mähte* (O.H.G. *mahti*), *mägede* (O.H.G. *magadi*). The earlier mutation of this sound produced an *e*(*é*), a closed sound (*i.e.* nearer *i*). Cf. *geste* (O.H.G. *gesti*).

The various Old High German vowels in unstressed syllables were either weakened to an indifferent *e* sound (*geben*, O.H.G. *geban*; *bote*, O.H.G. *boto*; *sige*, O.H.G. *sigu*) or disappeared altogether. The latter phenomenon is to be observed after *l* and *r*, and partly after *n* and *m* (cf. *ar*(*e*), O.H.G. *aro*; *zal*, O.H.G. *zala*; *wundern*, O.H.G. *wuntarōn*, &c.); but it by no means took place everywhere in the same degree and at the same time. It has been already noted that the Alemannic dialect (as well as the archaic poets of the German national epic) retained at least the long unstressed vowels until as late as the 14th century (*gemarterōt*, *gekriuzegōt*, &c., and Low and Middle German preserved the weakened *e* sound in many cases where Upper German dropped it. In this period the beginnings are also to be seen in Low and Middle German (Heinrich von Veldeke shows the first traces of it) of a process which became of great importance for the formation of the Modern German literary language. This is the lengthening of originally short vowels in open syllables,[17] for example, in Modern High German *Tāges*, *Wēges*, *lōbe* (Middle High German *tăges*, *wĕges*, *lŏbe*). In Austria, on the other hand, there began as far back as the first half of the 12th century another movement of equal importance

for Modern High German, namely, the conversion of the long vowels, *ī*, *ū*, *ǖ*, into *ei* (*ou*), *au*, *eu* (*äu*).[18] It is, therefore, in MSS. written in the south-east that we find forms like *zeit*, *lauter* (*löter*), *heute*, &c., for the first time. With the exception of Low German and Alemannic—Swabian, however, follows in this respect the majority—all the German dialects participated in this change between the 14th and 16th centuries, although not all to the same degree. The change was perhaps assisted by the influence of the literary language which had recognized the new sounds. In England the same process has led to the modern pronunciation of *time*, *house*, &c., and in Holland to that of *tijd*, *huis*, &c. F. Wrede (*Zeitschrift für deutsches Altertum* xxxix. 257 ff.) has suggested that the explanation of the change is to be sought in the apocope and syncope of the final *e*, and the greater stress which was in consequence put on the stem-syllable. The tendency to a change in the opposite direction, namely, the narrowing of diphthongs to monophthongs, is to be noticed in Middle German dialects, *i.e.* in dialects which resisted the apocope of the final *e*, where *ie*, *uo*, *üe* become *ī*, *ū*, *ǖ*; thus we have for *Brief*, *brīf*, for *huon*, *hūn*, for *brüeder*, *brüder*, and this too was taken over into the Modern High German literary language.[19]

No consonantal change was so widespread during this period as that of initial *s* to *sch* before *l*, *n*, *m*, *w*, *p* and *t*. Cf. *slingen*, *schlingen*; *swer* (*e*) *n*, *schwören*, &c. The forms *scht-* and *schp-* are often to be met with in Alemannic MSS., but they were discarded again, although modern German recognizes the pronunciation *schp*, *scht*.[20] With regard to changes affecting the inflections of verbs and nouns, it must suffice here to point out that the weakening or disappearance of vowels in unstressed syllables necessarily affected the characteristic endings of the older language; groups of verbs and substantives which in Old High German were distinct now become confused. This is best seen in the case of the weak verbs, where the three Old High German classes (cf. *nerien*, *salbōn*, *dagēn*) were fused into one. Similarly in the declensions we find an increasing tendency of certain forms to influence substantives belonging to other classes; there is, for instance, an increase in the number of neuter nouns taking *-er* (*-ir*) in the plural, and of those which show mutation in the plural on the model of the *i-* stems (O.H.G. *gast*, pl. *gesti*; cf. forms like *ban*, *benne*; *hals*, *helse*; *wald*, *welde*). Of changes in syntax the gradual decay in the use of the genitive case dependent on a noun or governed by a verb (cf. constructions like *eine brünne rotes goldes*, or *des todes wünschen*) towards the end of the period, and also the disappearance of the Old High German sequence of tenses ought at least to be mentioned.

In the Middle High German period, the first classical period of German poetry, the German language made great advances as a vehicle of literary expression; its power of expression was increased and it acquired a beauty of style hitherto unknown. This was the period of the *Minnesang* and the great popular and court epics, of Walther von der Vogelweide, Hartmann von Aue, Wolfram von Eschenbach and Gottfried von Strassburg; it was a period when literature enjoyed the fostering care of the courts and the nobility. At the same time German prose celebrated its first triumphs in the sermons of Berthold von Regensburg, and in the mystic writings and sermons of Meister Eckhart, Tauler and others. History (Eike von Repkow's *Weltchronik*) and law (*Sachsenspiegel*, *Schwabenspiegel*) no longer despised the vernacular, and from about the middle of the 13th century German becomes, in an ever-increasing percentage, the language of deeds and charters.

It has been a much debated question how far Germany in Middle High German times possessed or aspired to possess a *Schriftsprache* or literary language.[21] About the year 1200 there was undoubtedly a marked tendency towards a unification of the literary language on the part of the more careful poets like Walther von der Vogelweide, Hartmann von Aue and Gottfried von Strassburg; they avoid, more particularly in their rhymes, dialectic peculiarities, such as the Bavarian dual forms *es* and *enk*, or the long vowels in unstressed syllables, retained in Alemannic, and they do not make use of archaic words or forms. We have thus a right to speak, if not of a Middle High German literary language in the widest sense of the word, at least of a Middle High German *Dichtersprache* or poetic language, on an Alemannic-Franconian basis. Whether, or in how far, this may have affected the ordinary speech of the nobility or courts, is a matter of conjecture; but it had an undeniable influence on Middle and Low German poets, who endeavoured at least to use High German forms in their rhymes. Attempts were also made in Low German districts, though at a later stage of this period, to unify the dialects and raise them to the level of an accepted literary language. It will be shown later why these attempts were unsuccessful. Unfortunately, however, the efforts of the High German poets to form a uniform language were also shortlived; by the end of the 13th century the *Dichtersprache* had disappeared, and the dialects again reigned supreme.

Modern High German

Although the Middle High German period had thus not succeeded in effecting any permanent advance in the direction of a uniform literary language, the desire for a certain degree of uniformity was never again entirely lost. At the close of the 13th century literature had passed from the hands of the nobility to those of the middle classes of the towns; the number of writers

who used the German tongue rapidly increased; later the invention of printing, the increased efficiency of the schools, and above all the religious movement of the Reformation, contributed to awakening the desire of being understood by those who stood outside the dialectic community of the individual. A single authoritative form of writing and spelling was felt on all sides to be particularly necessary. This was found in the language used officially by the various chanceries (*Kanzleien*), and more especially the imperial chancery. Since the days of Charles IV. (1347-1378) the latter had striven after a certain uniform language in the documents it issued, and by the time of Maximilian I. (1493-1519) all its official documents were characterized by pretty much the same phonology, forms and vocabulary, in whatever part of Germany they originated. And under Maximilian's successor, Charles V., the conditions remained pretty much the same. The fact that the seat of the imperial chancery had for a long time been in Prague, led to a mingling of Upper and Middle German sounds and inflections; but when the crown came with Frederick III. (1440-1493) to the Habsburgs, the Upper German elements were considerably increased. The chancery of the Saxon electorate, whose territory was exclusively Middle German, had to some extent, under the influence of the imperial chancery, allowed Upper German characteristics to influence its official language. This is clearly marked in the second half of the 15th century, and about the year 1500 there was no essential difference between the languages of the two chanceries. Thuringia, Silesia and Brandenburg soon followed suit, and even Low German could not ultimately resist the accepted High German notation (*ö, ő, ü, ű, ů, ie*, &c.). We have here very favourable conditions for the creation of a uniform literary language, and, as has already been said, the tendency to follow these authorities is clearly marked.

In the midst of this development arose the imposing figure of Luther, who, although by no means the originator of a common High German speech, helped very materially to establish it. He deliberately chose (cf. the often quoted passage in his *Tischreden*, ch. 69) the language of the Saxon chancery as the vehicle of his Bible translation and subsequently of his own writings. The differences between Luther's usage and that of the chancery, in phonology and inflection, are small; still he shows, in his writings subsequent to 1524, a somewhat more pronounced tendency towards Middle German. But it is noteworthy that he, like the chancery, retained the old vowel-change in the singular and plural of the preterite of the strong verbs (*i.e. steig, stigen; starb, sturben*), although before Luther's time the uniformity of the modern preterite had already begun to show itself here and there. The adoption of the language of the chancery gave rise to the mixed character of sounds and forms which is still a feature of the literary language of Germany. Thus the use of the monophthongs *ī, ü*, and *ṻ*, instead of the old diphthongs *ie, uo* and *üe*, comes from Middle Germany; the forms of the words and the gender of the nouns follow Middle rather than Upper German usage, whereas, on the other hand, the consonantal system (*p* to *pf*; *d* to *t*) betrays in its main features its Upper German (Bavarian-Austrian) origin.

The language of Luther no doubt shows greater originality in its style and vocabulary (cf. its influence on Goethe and the writers of the *Sturm und Drang*), for in this respect the chancery could obviously afford him but scanty help. His vocabulary is drawn to a great extent from his own native Middle German dialect, and the fact that, since the 14th century, Middle German literature (cf. for instance, the writings of the German mystics, at the time of and subsequent to Eckhart) had exercised a strong influence over Upper Germany, stood him in good stead. Luther is, therefore, strictly speaking, not the father of the modern German literary language, but he forms the most important link in a chain of development which began long before him, and did not reach its final stage until long after him. To infer that Luther's language made any rapid conquest of Germany would not be correct. It was, of course, immediately acceptable to the eastern part of the Middle German district (Thuringia and Silesia), and it did not find any great difficulty in penetrating into Low Germany, at least into the towns and districts lying to the east of the Saale and Elbe (Magdeburg, Hamburg). One may say that about the middle of the 16th century Luther's High German was the language of the chanceries, about 1600 the language of the pulpit (the last Bible in Low German was printed at Goslar in 1621) and the printing presses. Thus the aspirations of Low Germany to have a literary language of its own were at an early stage crushed. Protestant Switzerland, on the other hand, resisted the "uncommon new German" until well into the 17th century. It was also natural that the Catholic Lower Rhine (Cologne) and Catholic South Germany held out against it, for to adopt the language of the reformer would have seemed tantamount to offering a helping hand to Protestant ideas. At the same time, geographical and political conditions, as well as the pronounced character of the Upper German dialects, formed an important obstacle to a speedy unification. South German grammarians of the 16th century, such as Laurentius Albertus, raise a warning voice against those who, although far distant from the proper use of words and the true pronunciation, venture to teach *nos puriores Germanos*, namely, the Upper Germans.

In 1593 J. Helber, a Swiss schoolmaster and notary, spoke of three separate dialects as being in use by the printing presses:[22] (1) *Mitteldeutsch* (the language of the printers in Leipzig, Erfurt, Nuremberg, Würzburg, Frankfort, Mainz, Spires, Strassburg and Cologne; at the last mentioned place in the event of their attempting to print *Ober-Teutsch*); (2) *Donauisch* (the printers' language in South Germany, but limited to Bavaria and Swabia proper—here more

particularly the Augsburg idiom, which was considered to be particularly *zierlich*);[23] (3) *Höchst Reinisch*, which corresponds to Swiss German. Thus in the 16th century Germany was still far from real unity in its language; but to judge from the number and the geographical position of the towns which printed in *Mitteldeutsch* it is pretty clear which idiom would ultimately predominate. During the 17th century men like M. Opitz (*Buch von der deutschen Poeterey*) and J.G. Schottelius (*Teutsche Sprachkunst*, 1641, and *Von der teutschen Sprachkunst*, 1663), together with linguistic societies like the *Fruchtbringende Gesellschaft* and the Nuremberg *Pegnitzorden*, did a great deal to purify the German language from foreign (especially French) elements; they insisted on the claims of the vernacular to a place beside and even above Latin (in 1687 Christian Thomasius held for the first time lectures in the German language at the university of Leipzig), and they established a firm grammatical basis for Luther's common language, which especially in the hymnals had become modernized and more uniform. About the middle of the 17th century the disparity between the vowels of the singular and plural of the preterite of the strong verbs practically ceases; under East Middle German influence the final *e* is restored to words like *Knabe*, *Jude*, *Pfaffe*, which in South German had been *Knab*, &c.; the mixed declension (*Ehre*, *Ehren*; *Schmerz*, *Schmerzen*) was established, and the plural in *-er* was extended to some masculine nouns (*Wald*, *Wälder*);[24] the use of the mutated sound has now become the rule as a plural sign (Väter, Bäume). How difficult, even in the first half of the 18th century, it was for a Swiss to write the literary language which Luther had established is to be seen from the often quoted words of Haller (1708-1777): "I am a Swiss, the German language is strange to me, and its choice of words was almost unknown to me." The Catholic south clung firmly to its own literary language, based on the idiom of the imperial chancery, which was still an influential force in the 17th century or on local dialects. This is apparent in the writings of Abraham a Sancta Clara,[25] who died in 1709, or in the attacks of the Benedictine monk, Augustin Dornblüth, on the *Meissner Schriftsprache* in 1755.

In the 18th century, to which these names have introduced us, the grammatical writings of J.C. Gottsched (*Deutsche Sprachkunst*, 1748) and J.C. Adelung (*Grammatisch-kritisches Wörterbuch der hochdeutschen Mundart*, 1774-1786) exercised a decisive and far-reaching influence. Gottsched took as his basis the spoken language (*Umgangssprache*) of the educated classes of Upper Saxony (Meissen), which at this time approximated as nearly as possible to the literary language. His *Grammar* did enormous services to the cause of unification, ultimately winning over the resisting south; but he carried his purism to pedantic lengths, he would tolerate no archaic or dialectical words, no unusual forms or constructions, and consequently made the language unsuited for poetry. Meanwhile an interest in Old German literature was being awakened by Bodmer; Herder set forth better ideas on the nature of language, and insisted on the value of native idioms; and the *Sturm und Drang* led by Goethe encouraged all individualistic tendencies. All this gave rise to a movement counter to Gottsched's absolutism, which resulted in the revival of many obsolete German words and forms, these being drawn partly from Luther's Bible translation (cf. V. Hehn, "Goethe und die Sprache der Bibel," in the *Goethe-Jahrbuch*, viii. p. 187 ff.), partly from the older language and partly from the vocabulary peculiar to different social ranks and trades.[26] The latter is still a source of linguistic innovations. German literary style underwent a similar rejuvenation, for we are on the threshold of the second classical period of German literature. It had strengthened Gottsched's hand as a linguistic reformer that the earlier leaders of German literature, such as Gellert, Klopstock and Lessing, were Middle Germans; now Wieland's influence, which was particularly strong in South Germany, helped materially towards the establishment of one accepted literary language throughout all German-speaking countries; and the movement reaches its culmination with Goethe and Schiller. At the same time this unification did not imply the creation of an unalterable standard; for, just as the language of Opitz and Schottelius differed from that of Luther, so—although naturally in a lesser degree—the literary language of our day differs from that of the classic writers of the 18th century. Local peculiarities are still to be met with, as is to be seen in the modern German literature that emanates from Switzerland or Austria.

But this unity, imperfect as it is, is limited to the literary language. The differences are much more sharply accentuated in the *Umgangssprache*,[27] whereby we understand the language as it is spoken by educated people throughout Germany; this is not only the case with regard to pronunciation, although it is naturally most noticeable here, but also with regard to the choice of words and the construction of sentences. Compared with the times of Goethe and Schiller a certain advance towards unification has undoubtedly been made, but the differences between north and south are still very great. This is particularly noticeable in the pronunciation of *r*—either the uvular *r* or the *r* produced by the tip of the tongue; of the voiced and voiceless stops, *b*, *p*, *d*, *t*, *g* and *k*; of the *s* sounds; of the diphthongs; of the long vowels *ē* and *ōē*, &c. (cf. W. Vietor, *German Pronunciation*, 2nd ed., 1890). The question as to whether a unified pronunciation (*Einheitaussprache*) is desirable or even possible has occupied the attention of academies, scholars and the educated public during recent years, and in 1898 a commission made up of scholars and theatre directors drew up a scheme of pronunciation for use in the royal theatres of Prussia.[28] This scheme has since been recommended to all German theatres by the German *Bühnenverein*. Desirable as such a uniform pronunciation is for the national

theatre, it is a much debated question how far it should be adopted in the ordinary speech of everyday life. Some scholars, such as W. Braune, declared themselves strongly in favour of its adoption;[29] Braune's argument being that the system of modern pronunciation is based on the spelling, not on the sounds produced in speaking. The latter, he holds, is only responsible for the pronunciation of *-chs-* as *-ks-* in *wachsen*, *Ochse*, &c., or for that of *sp-* and *st-* in *spielen*, *stehen*, &c. Other scholars, again, such as K. Luick and O. Brenner, warn against any such attempts to create a living language on an artificial basis;[30] the *Bühnendeutsch* or "stage-German" they regard as little more than an abstract ideal. Thus the decision must be left to time.

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Modern High German Period: E. Wülcker, "Die Entstehung der kursächsischen Kanzleisprache" (in the *Zeitschrift des Vereins für kursächsische Geschichte*, ix. p. 349); the same, "Luthers Stellung zur kursächsischen Kanzleisprache" (in *Germania*, xxviii. pp. 191 ff.); P. Pietsch, *Martin Luther und die hochdeutsche Schriftsprache* (Breslau, 1883); K. Burdach, *Die Einigung der neuhochdeutschen Schriftsprache*, (1883); E. Opitz, *Die Sprache Luthers* (Halle, 1869); J. Luther, *Die Sprache Luthers in der Septemberbibel* (Halle, 1887); F. Kluge, *Von Luther bis Lessing* (Strassburg, 1888) (cf. E. Schröder's review in the *Göttinger gelehrte Anzeiger*, 1888, 249); H. Rückert, *Geschichte der neuhochdeutschen Schriftsprache bis zur Mitte des 18. Jahrhunderts* (1875): J. Kehrein, *Grammatik der deutschen Sprache des 15. bis 17. Jahrhunderts* (Leipzig, 2nd ed., 1863); K. von Bahder, *Grundlagen des neuhochdeutschen Lautsystems* (Strassburg, 1890); R. Meyer, *Einführung in das ältere Neuhochdeutsche* (Leipzig, 1894); W. Scheel, *Beiträge zur Geschichte der neuhochdeutschen Gemeinsprache in Köln* (Marburg, 1892); R. Brandstetter, *Die Rezeption der neuhochdeutschen Schriftsprache in Stadt und Landschaft Luzern* (1892); K. Burdach, "Zur Geschichte der neuhochdeutschen Schriftsprache" (*Forschungen zur deutschen Philologie*, 1894); the same, "Die Sprache des jungen Goethe" (*Verhandlungen der Dessauer Philologenversammlung*, 1884, p. 164 ff.); F. Kasch, *Die Sprache des jungen Schiller* (Dissertation, 1900); F. Kluge, "Über die Entstehung unserer Schriftsprache" (Beihefte zur *Zeitschrift des allgemeinen Sprachvereins*, Heft 6, 1894); A. Waag, *Bedeutungsentwickelung unseres Wortschatzes* (Lahr, 1901).

Mention must also be made of the work of the German commission of the Royal Prussian Academy, which in 1904 drew up plans for making an inventory of all German literary MSS. dating from before the year 1600 and for the publication of Middle High German and early Modern High German texts. This undertaking, which has made considerable progress, provides rich material for the study of the somewhat neglected period between the 14th and 16th centuries; at the same time it provides a basis on which a monumental history of Modern High German may be built up, as well as for a *Thesaurus linguae germanicae*.

(R. PR.)

1 K. Müllenhoff and W. Scherer, *Denkmäler deutscher Poesie und Prosa*, 3rd ed., by E. Steinmeyer, 1892, No. lxvii.

2 For a detailed description of the boundary line cf. O. Behaghel's article in Paul's *Grundriss*, 2nd ed., pp. 652-657, where there is also a map, and a very full bibliography relative to the changes in the boundary.

3 Cf. J. Grimm, *Deutsche Grammatik*, 3rd ed., i. p. 13; F. Kluge, *Etymologisches Wörterbuch*, 6th ed., pp. 75 ff.; K. Luick, "Zur Geschichte des Wortes 'deutsch,'" in *Anzeiger für deutsches Altertum*, xv., pp. 135, 248; H. Fischer, "Theotiscus, Deutsch," in Paul and Braune's *Beiträge*, xviii. p. 203; H. Paul, *Deutsches Wörterbuch* (1897), p. 93.

4 Cf. P. Kretschmer, *Einleitung in die Geschichte der griechischen Sprache* (Göttingen, 1896), who holds the mingling of Celtic and Germanic elements in southern and south-western Germany responsible for the change. It might also be mentioned here that H. Meyer (*Zeitschrift f. deut. Altertum*, xlv. pp. 101 ff.) endeavours to explain the first soundshifting by the change of abode of the Germanic tribes from the lowlands to the highlands of the Carpathian Mountains.

5 Of writers who have made extensive use of dialects, it must suffice to mention here the names of J.H. Voss, Hebel, Klaus Groth, Fritz Reuter, Usteri, G.D. Arnold, Holtei, Castelli, J.G. Seidl and Anzengruber, and in our own days G. Hauptmann.

6 Cf. F. Staub and L. Tobler, *Schweizerisches Idiotikon* (1881 ff.); E. Martin and F. Lienhart, *Wörterbuch der elsässischen Mundarten* (Strassburg, 1899 ff.); H. Fischer, *Schwäbisches Wörterbuch* (Tübingen, 1901 ff.). Earlier works, which are already completed, are J.A. Schmeller, *Bayrisches Wörterbuch* (2nd ed., 2 vols., Munich, 1872-1877); J.B. Schöpf, *Tiroler Idiotikon* (Innsbruck, 1886); M. Lexer, *Kärntisches Wörterbuch* (1862); H. Gradl, *Egerländer Wörterbuch*, i. (Eger, 1883); A.F.C. Vilmar, *Idiotikon von Kurhessen* (Marburg, 1883) (with supplements by H. von Pfister); W. Crecelius, *Oberhessisches Wörterbuch* (Darmstadt, 1890-1898). Professor J. Franck is responsible for a *Rheinisches Wörterbuch* for the Prussian Academy.

7 Cf. the article "Mundarten" by R. Loewe in R. Bethge, *Ergebnisse und Fortschritte der germanistischen Wissenschaft* (Leipzig, 1902), pp. 75-88; and F. Mentz, *Bibliographie der deutschen Mundartforschung* (Leipzig, 1892). Of periodicals may be mentioned Deutsche Mundarten, by J.W. Nagl (Vienna, 1896 ff.); *Zeitschrift für hochdeutsche Mundarten*, by O. Heilig and Ph. Lenz (Heidelberg, 1900 ff.), continued as *Zeitschrift f. deutsche Mundarten*, Verlag des Allgemeinen Deutschen Sprachvereins. Owing to its importance as a model for subsequent monographs J. Kinteler's *Die Kerenzer Mundart des Kantons Glarus* (Leipzig, 1876) should not be passed unnoticed.

8 Cf. especially H. Tümpel, "Die Mundarten des alten niedersächsischen Gebietes zwischen 1300 und 1500" (Paul und Braune's Beiträge, vii. pp. 1-104); *Niederdeutsche Studien*, by the same writer (Bielefeld, 1898); Bahnke, "Über Sprach- und Gaugrenzen zwischen Elbe und Weser" (*Jahrbuch des Vereins für niederdeutsche Sprachforschung*, vii. p. 77).

9 Upper Saxon and Thuringian are sometimes taken as a separate group.

10 Cf. W. Braune, "Zur Kenntnis des Fränkischen" (*Beiträge*, i. pp. 1-56); O. Böhme, *Zur Kenntnis des Oberfränkischen im 13., 14. und 15. Jahrh.* (Dissertation) (Leipzig, 1893), where a good account of the differences between the Rhenish Franconian and South Franconian dialects will be found.

11 Cf. C. Nörrenberg, "Lautverschiebungsstufe des Mittelfränkischen" (*Beiträge*, ix. 371 ff.); R. Heinzel, *Geschichte der niederfränkischen Geschäftssprache* (Paderborn, 1874).

12 This is also the dialect of the so-called Siebenbürger Sachsen.

13 Cf. E. Sievers, *Oxforder Benediktinerregel* (Halle, 1887), p. xvi.; J. Meier, Jolande (1887), pp. vii. ff.; O. Böhme, l.c. p. 60.

14 Lower Hesse (the northern and eastern parts) goes, however, in many respects its own way.

15 On the High German dialects cf. K. Weinhold, *Alemannische Grammatik* (Berlin, 1863); F. Kauffmann, *Geschichte der schwäbischen Mundart* (Strassburg, 1870); E. Haendcke, *Die mundartlichen Elemente in den elsässischen Urkunden* (Strassburg, 1894); K. Weinhold, *Bairische Grammatik* (1867); J.A. Schmeller, *Die Mundarten Baierns* (Munich, 1821); J.N. Schwäbl, *Die altbairischen Mundarten* (München, 1903); O. Brenner, *Mundarten und Schriftsprache in Bayern* (Bamberg, 1890); J. Schatz, *Die Mundart von Imst* (Strassburg, 1897); J.W. Nagl, *Der Vocalismus der bairisch-österreichischen Mundarten* (1890-1891); W. Gradl, *Die Mundarten Westböhmens* (Munich, 1896); P. Lessiak, "Die Mundart von Pernegg in Kärnten" (Paul and Braune, *Beiträge*, vol. xxviii.).

16 Cf., for a hypothesis of two *Umlautsperioden* during the Old High German time, F. Kauffmann, *Geschichte der schwäbischen Mundart* (Strassburg, 1890), S. 152.

17 Cf. W. Wilmanns, *Deutsche Grammatik*, i. (2nd edition) pp. 300-304.

18 Wilmanns, l.c. pp. 273-280. It might be mentioned that, in Modern High German, these new diphthongs are neither in spelling nor in educated pronunciation distinguished from the older ones.

19 Cf. Wilmanns, pp. 280-284.

20 Ibid. pp. 129-132.

21 Cf. K. Lachmann, *Kleinere Schriften*, i. p. 161 ff.; Müllenhoff and Scherer's *Denkmäler* (3rd ed.), i.

p. xxvii.; H. Paul, *Gab es eine mhd. Schriftsprache?* (Halle, 1873); O. Behaghel, *Zur Frage nach einer mhd. Schriftsprache* (Basel, 1886) (Cf. Paul and Braune's *Beiträge*, xiii. p. 464 ff.); A. Socin, *Schriftsprache und Dialekte* (Heilbronn, 1888); H. Fischer, *Zur Geschichte des Mittelhochdeutschen* (Tübingen, 1889); O. Behaghel, *Schriftsprache und Mundart* (Giessen, 1896); K. Zwierzina, *Beobachtungen zum Reimgebrauch Hartmanns und Wolframs* (Haile, 1898); S. Singer, *Die mhd. Schriftsprache* (1900); C. Kraus, *Heinrich von Veldeke und die mhd. Dichtersprache* (Halle, 1899); G. Roethe, *Die Reimvorreden des Sachsenspiegels* (Berlin, 1899); H. Tümpel, *Niederdeutsche Studien* (1898).

22 For literature bearing on the complicated question of the *Druckersprachen*, readers are referred to the article "Neuhochdeutsche Schriftsprache," by W. Scheel, in Bethge's *Ergebnisse ... der germanistischen Wissenschaft* (1902), pp. 47, 50 f. Cf. also K. von Bahder, *Grundlagen des nhd. Lautsystems* (1890), pp. 15 ff.

23 A German *Priamel* mentions as an essential quality in a beautiful woman: "die red dort her von Swaben."

24 Cf. for a detailed discussion of the noun declension, K. Boiunga, *Die Entwicklung der mhd. Substantivflexion* (Leipzig, 1890); and, more particularly for the masculine and neuter nouns, two articles by H. Molz, "Die Substantivflexion seit mhd. Zeit," in Paul and Braune's *Beiträge*, xxvii. p. 209 ff. and xxxi. 277 ff. For the changes in the gender of nouns, A. Polzin, *Geschlechtswandel der Substantiva im Deutschen* (Hildesheim, 1903).

25 Cf. C. Blanckenburg, *Studien über die Sprache Abrahams a S. Clara* (Halle, 1897); H. Strigl, "Einiges über die Sprache des P. Abraham a Sancta Clara" (*Zeitschr. f. deutsche Wortforschung*, viii. 206 ff.).

26 Cf. F. Kluge, *Etymologisches Wörterbuch* (6th ed.), pp. 508 ff. One can speak of: *Studenten-, Soldaten-, Weidmanns-, Bergmanns-, Drucker-, Juristen-, und Zigeunersprache, und Rotwelsch*. Cf. F. Kluge, *Die deutsche Studentensprache* (Strassburg, 1894); *Rotwelsch* i. (Strassburg, 1901); R. Bethge, *Ergebnisse*, &c., p. 55 f.

27 Cf. H. Wunderlich, *Unsere Umgangssprache* (Weimar, 1894).

28 Cf. Th. Siebs, *Deutsche Bühnenaussprache* (2nd ed., Berlin, 1901), and the same writer's *Grundzüge der Bühnensprache* (1900).

29 W. Braune, *Über die Einigung der deutschen Aussprache* (Halle, 1905); and the review by O. Brenner, in the *Zeitschrift des allgemeinen deutschen Sprachvereins*, Beihefte iv. 27, pp. 228-232.

30 Cf. K. Luick, *Deutsche Lautlehre mit besonderer Berücksichtigung der Sprechweise Wiens und der österreichischen Alpenländer* (1904); O. Brenner, "Zur Aussprache des Hochdeutschen" l.c., pp. 218-228.

GERMAN LITERATURE. Compared with other literatures, that of the German-speaking peoples presents a strangely broken and interrupted course; it falls into more or less isolated groups, separated from each other by periods which in intellectual darkness and ineptitude are virtually without a parallel in other European lands. The explanation of this irregularity of development is to be sought less in the chequered political history of the German people—although this was often reason enough—than in the strongly marked, one might almost say, provocative character of the national mind as expressed in literature. The Germans were not able, like their partially latinized English cousins—or even their Scandinavian neighbours—to adapt themselves to the various waves of literary influence which emanated from Italy and France and spread with irresistible power over all Europe; their literary history has been rather a struggle for independent expression, a constant warring against outside forces, even when the latter—like the influence of English literature in the 18th century and of Scandinavian at the close of the 19th—were hailed as friendly and not hostile. It is a peculiarity of German literature that in those ages when, owing to its own poverty and impotence, it was reduced to borrowing its ideas and its poetic forms from other lands, it sank to the most servile imitation; while the first sign of returning health has invariably been the repudiation of foreign influence and the assertion of the right of genius to untrammelled expression. Thus Germany's periods of literary efflorescence rarely coincide with those of other nations, and great European movements, like the Renaissance, passed over her without producing a single great poet.

This chequered course, however, renders the grouping of German literature and the task of the historian the easier. The first and simplest classification is that afforded by the various stages of linguistic development. In accordance with the three divisions in the history of the High German language, there is an Old High German, a Middle High German and a New High

German or Modern High German literary epoch. It is obvious, however, that the last of these divisions covers too enormous a period of literary history to be regarded as analogous to the first two. The present survey is consequently divided into six main sections:

I. The Old High German Period, including the literature of the Old Saxon dialect, from the earliest times to the middle of the 11th century.

II. The Middle High German Period, from the middle of the 11th to the middle of the 14th century.

III. The Transition Period, from the middle of the 14th century to the Reformation in the 16th century.

IV. The Period of Renaissance and Pseudo-classicism, from the end of the 16th century to the middle of the 18th.

V. The Classical Period of Modern German literature, from the middle of the 18th century to Goethe's death in 1832.

VI. The Period from Goethe's death to the present day.

I. The Old High German Period (*c.* 750-1050)

Of all the Germanic races, the tribes with which we have more particularly to deal here were the latest to attain intellectual maturity. The Goths had, centuries earlier, under their famous bishop Ulfilas or Wulfila, possessed the Bible in their vernacular, the northern races could point to their *Edda*, the Germanic tribes in England to a rich and virile Old English poetry, before a written German literature of any consequence existed at all. At the same time, these continental tribes, in the epoch that lay between the Migrations of the 5th century and the age of Charles the Great, were not without poetic literature of a kind, but it was not committed to writing, or, at least, no record of such a poetry has come down to us. Its existence is vouched for by indirect historical evidence, and by the fact that the sagas, out of which the German national epic was welded at a later date, originated in the great upheaval of the 5th century. When the vernacular literature began to emerge from an unwritten state in the 8th century, it proved to be merely a weak reflection of the ecclesiastical writings of the monasteries; and this, with very few exceptions, Old High German literature remained. Translations of the 784
liturgy, of Tatian's *Gospel Harmony* (*c.* 835), of fragments of sermons, form a large proportion of it. Occasionally, as in the so-called *Monsee Fragments*, and at the end of the period, in the prose of Notker Labeo (d. 1022), this ecclesiastical literature attains a surprising maturity of style and expression. But it had no vitality of its own; it virtually sprang into existence at the command of Charlemagne, whose policy with regard to the use of the vernacular in place of Latin was liberal and far-seeing; and it docilely obeyed the tastes of the rulers that followed, becoming severely orthodox under Louis the Pious, and consenting to immediate extinction when the Saxon emperors withdrew their favour from it. Apart from a few shorter poetic fragments of interest, such as the *Merseburg Charms* (*Zaubersprüche*), an undoubted relic of pre-Christian times, the *Wessobrunn Prayer* (*c.* 780), the *Muspilli*, an imaginative description of the Day of Judgment, and the *Ludwigslied* (881), which may be regarded as the starting point for the German historical ballad, the only High German poem of importance in this early period was the *Gospel Book* (*Liber evangeliorum*) of Otfrid of Weissenburg (*c.* 800-870). Even this work is more interesting as the earliest attempt to supersede alliteration in German poetry by rhyme, than for such poetic life as the monk of Weissenburg was able to instil into his narrative. In fact, for the only genuine poetry of this epoch we have to look, not to the High German but to the Low German races. They alone seemed able to give literary expression to the memories handed down in oral tradition from the 5th century; to Saxon tradition we owe the earliest extant fragment of a national saga, the *Lay of Hildebrand* (*Hildebrandslied*, *c.* 800), and a Saxon poet was the author of a vigorous alliterative version of the Gospel story, the *Heliand* (*c.* 830), and also of part of the Old Testament (*Genesis*). This alliterative epic—for epic it may be called—is the one poem of this age in which the Christian tradition has been adapted to German poetic needs. Of the existence of a lyric poetry we only know by hearsay; and the drama had nowhere in Europe yet emerged from its earliest purely liturgic condition. Such as it was, the vernacular literature of the Old High German period enjoyed but a brief existence, and in the 10th and 11th centuries darkness again closed over it. The dominant "German" literature in these centuries is in Latin; but that literature is not without national interest, for it shows in what direction the German mind was moving. The *Lay of Walter* (*Waltharilied*, *c.* 930), written in elegant hexameters by Ekkehard of St Gall, the moralizing dramas of Hrosvitha (Roswitha) of Gandersheim, the *Ecbasis captivi* (*c.* 940), earliest of all the Beast epics, and the romantic adventures of *Ruodlieb* (*c.* 1030), form a literature which, Latin although it is, foreshadows the future developments of German poetry.

(*a*) *Early Middle High German Poetry.*—The beginnings of Middle High German literature were hardly less tentative than those of the preceding period. The Saxon emperors, with their Latin and even Byzantine tastes, had made it extremely difficult to take up the thread where Notker let it drop. Williram of Ebersberg, the commentator of the *Song of Songs* (*c.* 1063), did certainly profit by Notker's example, but he stands alone. The Church had no helping hand to offer poetry, as in the more liberal epoch of the great Charles; for, at the middle of the 11th century, when the linguistic change from Old to Middle High German was taking place, a movement of religious asceticism, originating in the Burgundian monastery of Cluny, spread across Europe, and before long all the German peoples fell under its influence. For a century there was no room for any literature that did not place itself unreservedly at the service of the Church, a service which meant the complete abnegation of the brighter side of life. Repellent in their asceticism are, for instance, poems like *Memento mori* (*c.* 1050), *Vom Glauben*, a verse commentary on the creed by a monk Hartmann (*c.* 1120), and a poem on "the remembrance of death" (*Von des todes gehugede*) by Heinreich von Melk (*c.* 1150); only rarely, as in a few narrative Poems on Old Testament subjects, are the poets of this time able to forget for a time their lugubrious faith. In the *Ezzolied* (*c.* 1060), a spirited lay by a monk of Bamberg on the life, miracles and death of Christ, and in the *Annolied* (*c.* 1080), a poem in praise of the archbishop Anno of Cologne, we find, however, some traces of a higher poetic imagination.

The transition from this rigid ecclesiastic spirit to a freer, more imaginative literature is to be seen in the lyric poetry inspired by the Virgin, in the legends of the saints which bulk so largely in the poetry of the 12th century, and in the general trend towards mysticism. Andreas, Pilatus, Aegidius, Albanius are the heroes of monkish romances of that age, and the stories of Sylvester and Crescentia form the most attractive parts of the *Kaiserchronik* (*c.* 1130-1150), a long, confused chronicle of the world which contains many elements common to later Middle High German poetry. The national sagas, of which the poet of the *Kaiserchronik* had not been oblivious, soon began to assert themselves in the popular literature. The wandering *Spielleute*, the lineal descendants of the jesters and minstrels of the dark ages, who were now rapidly becoming a factor of importance in literature, were here the innovators; to them we owe the romance of *König Rother* (*c.* 1160), and the kindred stories of *Orendel*, *Oswald* and *Salomon und Markolf* (*Salman und Morolf*). All these poems bear witness to a new element, which in these years kindled the German imagination and helped to counteract the austerity of the religious faith—the Crusades. With what alacrity the Germans revelled in the wonderland of the East is to be seen especially in the *Alexanderlied* (*c.* 1130), and in *Herzog Ernst* (*c.* 1180), romances which point out the way to another important development of German medieval literature, the Court epic. The latter type of romance was the immediate product of the social conditions created by chivalry and, like chivalry itself, was determined and influenced by its French origin; so also was the version of the *Chanson de Roland* (*Rolandslied*, c. 1135), which we owe to another priest, Konrad of Regensburg, who, with considerable probability, has been identified with the author of the *Kaiserchronik*.

The Court epic was, however, more immediately ushered in by Eilhart von Oberge, a native of the neighbourhood of Hildesheim who, in his *Tristant* (*c.* 1170), chose that Arthurian type of romance which from now on was especially cultivated by the poets of the Court epic; and of equally early origin is a knightly romance of *Floris und Blancheflur*, another of the favourite love stories of the middle ages. In these years, too, the Beast epic, which had been represented by the Latin *Ecbasis captivi*, was reintroduced into Germany by an Alsatian monk, Heinrich der Glichezære, who based his *Reinhart Fuchs* (*c.* 1180) on the French *Roman de Renart*. Lastly, we have to consider the beginning of the *Minnesang*, or lyric, which in the last decades of the 12th century burst out with extraordinary vigour in Austria and South Germany. The origins are obscure, and it is still debatable how much in the German Minnesang is indigenous and national, how much due to French and Provençal influence; for even in its earliest phases the Minnesang reveals correspondences with the contemporary lyric of the south of France. The freshness and originality of the early South German singers, such as Kürenberg, Dietmar von Eist, the Burggraf of Rietenburg and Meinloh von Sevelingen, are not, however, to be questioned; in spite of foreign influence, their verses make the impression of having been a spontaneous expression of German lyric feeling in the 12th century. The *Spruchdichtung*, a form of poetry which in this period is represented by at least two poets who call themselves Herger and "Der Spervogel," was less dependent on foreign models; the pointed and satirical strophes of these poets were the forerunners of a vast literature which did not reach its highest development until after literature had passed from the hands of the noble-born knight to those of the burgher of the towns.

(*b*) *The Flourishing of Middle High German Poetry.*—Such was the preparation for the extraordinarily brilliant, although brief epoch of German medieval poetry, which corresponded

to the reigns of the Hohenstaufen emperors, Frederick I. Barbarossa, Henry VI. and Frederick II. These rulers, by their ambitious political aspirations and achievements, filled the German peoples with a sense of "world-mission," as the leading political power in medieval Europe. Docile pupils of French chivalry, the Germans had no sooner learned their lesson than they found themselves in the position of being able to dictate to the world of chivalry. In the same way, the German poets, who, in the 12th century, had been little better than clumsy translators of French romances, were able, at the beginning of the 13th, to substitute for French *chansons de geste* epics based on national sagas, to put a completely German imprint on the French Arthurian romance, and to sing German songs before which even the lyric of Provence paled. National epic, Court epic and Minnesang—these three types of medieval German literature, to which may be added as a subordinate group didactic poetry, comprise virtually all that has come down to us in the Middle High German tongue. A Middle High German prose hardly existed, and the drama, such as it was, was still essentially Latin.

The first place among the National or Popular epics belongs to the *Nibelungenlied*, which received its present form in Austria about the turn of the 12th and 13th centuries. Combining, as it does, elements from various cycles of sagas—the lower Rhenish legend of Siegfried, the Burgundian saga of Gunther and Hagen, the Gothic saga of Dietrich and Etzel—it stands out as the most representative epic of German medieval life. And in literary power, dramatic intensity and singleness of purpose its eminence is no less unique. The vestiges of gradual growth—of irreconcilable elements imperfectly welded together—may not have been entirely effaced, but they in no way lessen the impression of unity which the poem leaves behind it; whoever the welder of the sagas may have been, he was clearly a poet of lofty imagination and high epic gifts (see Nibelungenlied). Less imposing as a whole, but in parts no less powerful in its appeal to the modern mind, is the second of the German national epics, *Gudrun*, which was written early in the 13th century. This poem, as it has come down to us, is the work of an Austrian, but the subject belongs to a cycle of sagas which have their home on the shores of the North Sea. It seems almost a freak of chance that Siegfried, the hero of the Rhineland, should occupy so prominent a position in the *Nibelungenlied*, whereas Dietrich von Bern (*i.e.* of Verona), the name under which Theodoric the Great had been looked up to for centuries by the German people as their national hero, should have left the stamp of his personality on no single epic of the intrinsic worth of the *Nibelungenlied*. He appears, however, more or less in the background of a number of romances—*Die Rabenschlacht*, *Dietrichs Flucht*, *Alpharts Tod*, *Biterolf und Dietlieb*, *Laurin*, &c.—which make up what is usually called the *Heldenbuch*. It is tempting, indeed, to see in this very unequal collection the basis for what, under more favourable circumstances, might have developed into an epic even more completely representative of the German nation than the *Nibelungenlied*.

While the influence of the romance of chivalry is to be traced on all these popular epics, something of the manlier, more primitive ideals that animated German national poetry passed over to the second great group of German medieval poetry, the Court epic. The poet who, following Eilhart von Oberge's tentative beginnings, established the Court epic in Germany was Heinrich von Veldeke, a native of the district of the lower Rhine; his *Eneit*, written between 1173 and 1186, is based on a French original. Other poets of the time, such as Herbort von Fritzlar, the author of a *Liet von Troye*, followed Heinrich's example, and selected French models for German poems on antique themes; while Albrecht von Halberstadt translated about the year 1210 the *Metamorphoses* of Ovid into German verse. With the three masters of the Court epic, Hartmann von Aue, Wolfram von Eschenbach and Gottfried von Strassburg—all of them contemporaries—the Arthurian cycle became the recognized theme of this type of romance, and the accepted embodiment of the ideals of the knightly classes. Hartmann was a Swabian, Wolfram a Bavarian, Gottfried presumably a native of Strassburg. Hartmann, who in his *Erec* and *Iwein*, *Gregorius* and *Der arme Heinrich* combined a tendency towards religious asceticism with a desire to imbue the worldly life of the knight with a moral and religious spirit, provided the Court epic of the age with its best models; he had, of all the medieval court poets, the most delicate sense for the formal beauty of poetry, for language, verse and style. Wolfram and Gottfried, on the other hand, represent two extremes of poetic temperament. Wolfram's *Parzival* is filled with mysticism and obscure spiritual significance; its flashes of humour irradiate, although they can hardly be said to illumine, the gloom; its hero is, unconsciously, a symbol and allegory of much which to the poet himself must have been mysterious and inexplicable; in other words, *Parzival*—and Wolfram's other writings, *Willehalm* and *Titurel*, point in the same direction—is an instinctive or, to use Schiller's word, a "naïve" work of genius. Gottfried, again, is hardly less gifted and original, but he is a poet of a wholly different type. His *Tristan* is even more lucid than Hartmann's *Iwein*, his art is more objective; his delight in it is that of the conscious artist who sees his work growing under his hands. Gottfried's poem, in other words, is free from the obtrusion of those subjective elements which are in so high a degree characteristic of *Parzival*; in spite of the tragic character of the story, *Tristan* is radiant and serene, and yet uncontaminated by that tone of frivolity which the

Renaissance introduced into love stories of this kind.

Parzival and *Tristan* are the two poles of the German Court epic, and the subsequent development of that epic stands under the influence of the three poets, Hartmann, Wolfram and Gottfried; according as the poets of the 13th century tend to imitate one or other of these, they fall into three classes. To the followers and imitators of Hartmann belong Ulrich von Zatzikhoven, the author of a *Lanzelet* (*c.* 1195); Wirnt von Gravenberg, a Bavarian, whose *Wigalois* (*c.* 1205) shows considerable imaginative power; the versatile Spielmann, known as "Der Stricker"; and Heinrich von dem Türlin, author of an unwieldy epic, *Die Krone* ("the crown of all adventures," c. 1220). The fascination of Wolfram's mysticism is to be seen in *Der jüngere Titurel* of a Bavarian poet, Albrecht von Scharfenberg (*c.* 1270), and in the still later *Lohengrin* of an unknown poet; whereas Gottfried von Strassburg dominates the *Flore und Blanscheflur* of Konrad Fleck (*c.* 1220) and the voluminous romances of the two chief poets of the later 13th century, Rudolf von Ems, who died in 1254, and Konrad von Würzburg, who lived till 1287. Of these, Konrad alone carried on worthily the traditions of the great age, and even his art, which excels within the narrow limits of romances like *Die Herzemoere* and *Engelhard*, becomes diffuse and wearisome on the unlimited canvas of *Der Trojanerkrieg* and *Partonopier und Meliur*.

The most conspicuous changes which came over the narrative poetry of the 13th century were, on the one hand, a steady encroachment of realism on the matter and treatment of the epic, and, on the other, a leaning to didacticism. The substitution of the "history" of the chronicle for the confessedly imaginative stories of the earlier poets is to be seen in the work of Rudolf von Ems, and of a number of minor chroniclers like Ulrich von Eschenbach, Berthold von Holle and Jans Enikel; while for the growth of realism we may look to the *Pfaffe Amis*, a collection of comic anecdotes by "Der Stricker," the admirable peasant romance *Meier Helmbrecht*, written between 1236 and 1250 by Wernher der Gartenaere in Bavaria, and to the adventures of Ulrich von Lichtenstein, as described in his *Frauendienst* (1255) and *Frauenbuch* (1257).

More than any single poet of the Court epic, more even than the poet of the *Nibelungenlied*, Walther von der Vogelweide summed up in himself all that was best in the group of poetic literature with which he was associated—the Minnesang. The early Austrian singers already mentioned, poets like Heinrich von Veldeke, who in his lyrics, as in his epic, introduced the French conception of *Minne*, or like the manly Friedrich von Hausen, and the Swiss imitator of Provençal measures, Rudolf von Fenis appear only in the light of forerunners. Even more original poets, like Heinrich von Morungen and Walther's own master, Reinmar von Hagenau, the author of harmonious but monotonously elegiac verses, or among immediate contemporaries, Hartmann von Aue and Wolfram von Eschenbach, whose few lyric strophes are as deeply stamped with his individuality as his epics—seem only tributary to the full rich stream of Walther's genius. There was not a form of the German Minnesang which Walther did not amplify and deepen; songs of courtly love and lowly love, of religious faith and delight in nature, patriotic songs and political *Sprüche*—in all he was a master. Of Walther's life we are somewhat better informed than in the case of his contemporaries: he was born about 1170 and died about 1230; his art he learned in Austria, whereupon he wandered through South Germany, a welcome guest wherever he went, although his vigorous championship of what he regarded as the national cause in the political struggles of the day won him foes as well as friends. For centuries he remained the accepted exemplar of German lyric poetry; not merely the Minnesänger who followed him, but also the Meistersinger of the 15th and 16th centuries looked up to him as one of the founders and lawgivers of their art. He was the most influential of all Germany's lyric poets, and in the breadth, originality and purity of his inspiration one of her greatest (see Walther von der Vogelweide).

The development of the German Minnesang after Walther's death and under his influence is easily summed up. Contemporaries had been impressed by the dual character of Walther's lyric; they distinguished a higher courtly lyric, and a lower more outspoken form of song, free from the constraint of social or literary conventions. The later Minnesang emphasized this dualism. Amongst Walther's immediate contemporaries, high-born poets, whose lives were passed at courts, naturally cultivated the higher lyric; but the more gifted and original singers of the time rejoiced in the freedom of Walther's poetry of *niedere Minne*. It was, in fact, in accordance with the spirit of the age that the latter should have been Walther's most valuable legacy to his successors; and the greatest of these, Neidhart von Reuental (*c.* 1180-*c.* 1250), certainly did not allow himself to be hampered by aristocratic prejudices. Neidhart sought the themes of his *höfische Dorfpoesie* in the village, and, as the mood happened to dictate, depicted the peasant with humorous banter or biting satire. The lyric poets of the later 13th century were either, like Burkart von Hohenfels, Ulrich von Winterstetten and Gottfried von Neifen, echoes of Walther von der Vogelweide and of Neidhart, or their originality was confined to some particular form of lyric poetry in which they excelled. Thus the singer known

as “Der Tannhäuser” distinguished himself as an imitator of the French *pastourelle*; Reinmar von Zweter was purely a *Spruchdichter*. More or less common to all is the consciousness that their own ideas and surroundings were no longer in harmony with the aristocratic world of chivalry, which the poets of the previous generation had glorified. The solid advantages, material prosperity and increasing comfort of life in the German towns appealed to poets like Steinmar von Klingenau more than the unworldly ideals of self-effacing knighthood which Ulrich von Lichtenstein and Johann Hadlaub of Zürich clung to so tenaciously and extolled so warmly. On the whole, the Spruchdichter came best out of this ordeal of changing fashions; and the increasing interest in the moral and didactic applications of literature favoured the development of this form of verse. The confusion of didactic purpose with the lyric is common to all the later poetry, to that of the learned Marner, of Boppe, Rumezland and Heinrich von Meissen, who was known to later generations as “Frauenlob.” The *Spruchdichtung*, in fact, was one of the connecting links between the Minnesang of the 13th and the lyric and satiric poetry of the 15th and 16th centuries.

The disturbing and disintegrating element in the literature of the 13th century was thus the substitution of a utilitarian didacticism for the idealism of chivalry. In the early decades of that century, poems like *Der Winsbeke*, by a Bavarian, and *Der welsche Gast*, written in 1215-1216 by Thomasin von Zirclaere (Zirclaria), a native of Friuli, still teach with uncompromising idealism the duties and virtues of the knightly life. But in the *Bescheidenheit* (*c.* 1215-1230) of a wandering singer, who called himself Freidank, we find for the first time an active antagonism to the unworldly code of chivalry and an unmistakable reflection of the changing social order, brought about by the rise of what we should now call the middle class. Freidank is the spokesman of the *Bürger*, and in his terse, witty verses may be traced the germs of German intellectual and literary development in the coming centuries—even of the Reformation itself. From the advent of Freidank onwards, the satiric and didactic poetry went the way of the epic; what it gained in quantity it lost in quality and concentration. The satires associated with the name of Seifried Helbling, an Austrian who wrote in the last fifteen years of the 13th century, and *Der Renner* by Hugo von Trimberg, written at the very end of the century, may be taken as characteristic of the later period, where terseness and incisive wit have given place to diffuse moralizing and allegory.

There is practically no Middle High German literature in prose; such prose as has come down to us—the tracts of David of Augsburg, the powerful sermons of Berthold von Regensburg (d. 1272), Germany’s greatest medieval preacher, and several legal codes, as the *Sachsenspiegel* and *Schwabenspiegel*—only prove that the Germans of the 13th century had not yet realized the possibilities of prose as a medium of literary expression.

III. The Transition Period (1350-1600)

(*a*) *The Fourteenth and Fifteenth Centuries.*—As is the case with all transitional periods of literary history, this epoch of German literature may be considered under two aspects: on the one hand, we may follow in it the decadence and disintegration of the literature of the Middle High German period; on the other, we may study the beginnings of modern forms of poetry and the preparation of that spiritual revolution, which meant hardly less to the Germanic peoples than the Renaissance to the Latin races—the Protestant Reformation.

By the middle of the 14th century, knighthood with its chivalric ideals was rapidly declining, and the conditions under which medieval poetry had flourished were passing away. The social change rendered the courtly epic of Arthur’s Round Table in great measure incomprehensible to the younger generation, and made it difficult for them to understand the spirit that actuated the heroes of the national epic; the tastes to which the lyrics of the great Minnesingers had appealed were vitiated by the more practical demands of the rising middle classes. But the stories of chivalry still appealed as stories to the people, although the old way of telling them was no longer appreciated. The feeling for beauty of form and expression was lost; the craving for a moral purpose and didactic aim had to be satisfied at the cost of artistic beauty; and sensational incident was valued more highly than fine character-drawing or inspired poetic thought. Signs of the decadence are to be seen in the *Karlmeinet* of this period, stories from the youth of Charlemagne, in a continuation of *Parzival* by two Alsatians, Claus Wisse and Philipp Colin (*c.* 1335), in an *Apollonius von Tyrus* by Heinrich von Neuenstadt (*c.* 1315), and a *Königstochter von Frankreich* by Hans von Bühel (*c.* 1400). The story of Siegfried was retold in a rough ballad, *Das Lied von hürnen Seyfried*, the *Heldenbuch* was recast in *Knittelvers* or doggerel (1472), and even the Arthurian epic was parodied. A no less marked symptom of decadence is to be seen in a large body of allegorical poetry analogous to the *Roman de la rose* in France; Heinzelein of Constance, at the end of the 13th, and Hadamar von Laber and Hermann von Sachsenheim, about the middle of the 15th century, were representatives of this movement. As time went on, prose versions of the old stories became more general, and out of

these developed the *Volksbücher*, such as *Loher und Maller*, *Die Haimonskinder*, *Die schöne Magelone*, *Melusine*, which formed the favourite reading of the German people for centuries. As the last monuments of the decadent narrative literature of the middle ages, we may regard the *Buch der Abenteuer* of Ulrich Füetrer, written at the end of the 15th century, and *Der Weisskönig* and *Teuerdank* by the emperor Maximilian I. (1459-1519) printed in the early years of the 16th. At the beginning of the new epoch the Minnesang could still point to two masters able to maintain the great traditions of the 13th century, Hugo von Montfort (1357-1423) and Oswald von Wolkenstein (1367-1445); but as the lyric passed into the hands of the middle-class poets of the German towns, it was rapidly shorn of its essentially lyric qualities; *die Minne* gave place to moral and religious dogmatism, emphasis was laid on strict adherence to the rules of composition, and the simple forms of the older lyric were superseded by ingenious metrical distortions. Under the influence of writers like Heinrich von Meissen (“Frauenlob,” *c.* 1250-1318) and Heinrich von Mügeln in the 14th century, like Muskatblut and Michael Beheim (1416-*c.* 1480) in the 15th, the Minnesang thus passed over into the Meistergesang. In the later 15th and in the 16th centuries all the south German towns possessed flourishing Meistersinger schools in which the art of writing verse was taught and practised according to complicated rules, and it was the ambition of every gifted citizen to rise through the various grades from *Schüler* to *Meister* and to distinguish himself in the “singing contests” instituted by the schools.

Such are the decadent aspects of the once rich literature of the Middle High German period in the 14th and 15th centuries. Turning now to the more positive side of the literary movement, we have to note a revival of a popular lyric poetry—the Volkslied—which made the futility and artificiality of the Meistergesang more apparent. Never before or since has Germany been able to point to such a rich harvest of popular poetry as is to be seen in the Volkslieder of these two centuries. Every form of popular poetry is to be found here—songs of love and war, hymns and drinking-songs, songs of spring and winter, historical ballads, as well as lyrics in which the old motives of the Minnesang reappear stripped of all artificiality. More obvious ties with the literature of the preceding age are to be seen in the development of the *Schwank* or comic anecdote. Collections of such stories, which range from the practical jokes of *Till Eulenspiegel* (1515), and the coarse witticisms of the *Pfaffe vom Kalenberg* (end of 14th century) and *Peter Leu* (1550), to the religious and didactic anecdotes of J. Pauli’s *Schimpf und Ernst* (1522) or the more literary *Rollwagenbüchlein* (1555) of Jörg Wickram and the *Wendunmut* (1563 ff.) of H.W. Kirchhoff—these dominate in large measure the literature of the 15th and 16th centuries; they are the literary descendants of the medieval *Pfaffe Amis*, *Markolf* and *Reinhart Fuchs*. An important development of this type of popular literature is to be seen in the *Narrenschiff* of Sebastian Brant (1457-1521), where the humorous anecdote became a vehicle of the bitterest satire; Brant’s own contempt for the vulgarity of the ignorant, and the deep, unsatisfied craving of all strata of society for a wider intellectual horizon and a more humane and dignified life, to which Brant gave voice, make the *Narrenschiff*, which appeared in 1494, a landmark on the way that led to the Reformation. Another form—the Beast fable and Beast epic—which is but sparingly represented in earlier times, appealed with peculiar force to the new generation. At the very close of the Middle High German period, Ulrich Boner had revived the Aesopic fable in his *Edelstein* (1349), translations of Aesop in the following century added to the popularity of the fable (*q.v.*), and in the century of the Reformation it became, in the hands of Burkard Waldis (*Esopus*, 1548) and Erasmus Alberus (*Buch von der Tugend und Weisheit*, 1550), a favourite instrument of satire and polemic. A still more attractive form of the Beast fable was the epic of *Reinke de Vos*, which had been cultivated by Flemish poets in the 13th and 14th centuries and has come down to us in a Low Saxon translation, published at Lübeck in 1498. This, too, like Brant’s poem, is a powerful satire on human folly, and is also, like the *Narrenschiff*, a harbinger of the coming Reformation.

A complete innovation was the drama (*q.v.*), which, as we have seen, had practically no existence in Middle High German times. As in all European literatures, it emerged slowly and with difficulty from its original subservience to the church liturgy. As time went on, the vernacular was substituted for the original Latin, and with increasing demands for pageantry, the scene of the play was removed to the churchyard or the market-place; thus the opportunity arose in the 14th and 15th centuries for developing the *Weihnachtsspiel*, *Osterspiel* and *Passionsspiel* on secular lines. The enlargement of the scope of the religious play to include legends of the saints implied a further step in the direction of a complete separation of the drama from ecclesiastical ceremony. The most interesting example of this encroachment of the secular spirit is the *Spiel von Frau Jutten*—Jutta being the notorious Pope Joan—by an Alsatian, Dietrich Schernberg, in 1480. Meanwhile, in the 15th century, a beginning had been made of a drama entirely independent of the church. The mimic representations—originally allegorical in character—with which the people amused themselves at the great festivals of the year, and more especially in spring, were interspersed with dialogue, and performed on an improvised stage. This was the beginning of the *Fastnachtsspiel* or Shrovetide-play, the subject of which

was a comic anecdote similar to those of the many collections of *Schwänke*. Amongst the earliest cultivators of the *Fastnachtsspiel* were Hans Rosenplüt (fl. *c.* 1460) and Hans Folz (fl. *c.* 1510), both of whom were associated with Nuremberg.

(*b*) *The Age of the Reformation.*—Promising as were these literary beginnings of the 15th century, the real significance of the period in Germany's intellectual history is to be sought outside literature, namely, in two forces which immediately prepared the way for the Reformation—mysticism and humanism. The former of these had been a more or less constant factor in German religious thought throughout the middle ages, but with Meister Eckhart (? 1260-1327), the most powerful and original of all the German mystics, with Heinrich Seuse or Suso (*c.* 1300-1366), and Johannes Tauler (*c.* 1300-1361), it became a clearly defined mental attitude towards religion; it was an essentially personal interpretation of Christianity, and, as such, was naturally conducive to the individual freedom which Protestantism ultimately realized. It is thus not to be wondered at that we should owe the early translations of the Bible into German—one was printed at Strassburg in 1466—to the mystics. Johann Geiler von Kaisersberg (1445-1510), a pupil of the humanists and a friend of Sebastian Brant, may be regarded as a link between Eckhart and the earlier mysticists and Luther. Humanism was transplanted to German soil with the foundation of the university of Prague in 1348, and it made even greater strides than mysticism. Its immediate influence, however, was restricted to the educated classes; the pre-Reformation humanists despised the vernacular and wrote and thought only in Latin. Thus although neither Johann Reuchlin of Pforzheim (1455-1522), nor even the patriotic Alsatian, Jakob Wimpfeling (or Wimpheling) (1450-1528)—not to mention the great Dutch humanist Erasmus of Rotterdam (1466-1536)—has a place in the history of German literature, their battle for liberalism in thought and scholarship against the narrow orthodoxy of the Church cleared the way for a healthy national literature among the German-speaking peoples. The incisive wit and irony of humanistic satire—we need only instance the *Epistolae obscurorum virorum* (1515-1517)—prevented the German satirists of the Reformation age from sinking entirely into that coarse brutality to which they were only too prone. To the influence of the humanists we also owe many translations from the Latin and Italian dating from the 15th century. Prominent among the writers who contributed to the group of literature were Niklas von Wyl, chancellor of Württemberg, and his immediate contemporary Albrecht von Eyb (1420-1475).

Martin Luther (1483-1546), Germany's greatest man in this age of intellectual new-birth, demands a larger share of attention in a survey of literature than his religious and ecclesiastical activity would in itself justify, if only because the literary activity of the age cannot be regarded apart from him. From the Volkslied and the popular *Schwank* to satire and drama, literature turned exclusively round the Reformation which had been inaugurated on the 31st of October 1517 by Luther's publication of the *Theses against Indulgences* in Wittenberg. In his three tracts, *An den christlichen Adel deutscher Nation*, *De captivitate Babylonica ecclesiae*, and *Von der Freiheit eines Christenmenschen* (1520), Luther laid down his principles of reform, and in the following year resolutely refused to recant his heresies in a dramatic scene before the Council of Worms. Luther's Bible (1522-1534) had unique importance not merely for the religious and intellectual welfare of the German people, but also for their literature. It is in itself a literary monument, a German classic, and the culmination and justification of that movement which had supplanted the medieval knight by the burgher and swept away Middle High German poetry. Luther, well aware that his translation of the Bible must be the keystone to his work, gave himself endless pains to produce a thoroughly German work—German both in language and in spirit. It was important that the dialect into which the Bible was translated should be comprehensible over as wide an area as possible of the German-speaking world, and for this reason he took all possible care in choosing the vocabulary and forms of his *Gemeindeutsch*. The language of the Saxon chancery thus became, thanks to Luther's initiative, the basis of the modern High German literary language. As a hymn-writer (*Geistliche Lieder*, 1564), Luther was equally mindful of the importance of adapting himself to the popular tradition; and his hymns form the starting-point for a vast development of German religious poetry which did not reach its highest point until the following century.

The most powerful and virile literature of this age was the satire with which the losing side retaliated on the Protestant leaders. Amongst Luther's henchmen, Philipp Melanchthon (1497-1560), the "praeceptor Germaniae," and Ulrich von Hutten (1488-1523) were powerful allies in the cause, but their intellectual sympathies were with the Latin humanists; and with the exception of some vigorous German prose and still more vigorous German verse by Hutten, both wrote in Latin. The satirical dramas of Niklas Manuel, a Swiss writer and the polemical fables of Erasmus Alberus (*c.* 1500-1553), on the other hand, were insignificant compared with the fierce assault on Protestantism by the Alsatian monk, Thomas Murner (1475-1537). The most unscrupulous of all German satirists, Murner shrank from no extremes of scurrility, his attacks on Luther reaching their culmination in the gross personalities of *Von dem lutherischen Narren* (1522). It was not until the following generation that the Protestant party

could point to a satirist who in genius and power was at all comparable to Murner, namely, to Johann Fischart (*c.* 1550-*c.* 1591); but when Fischart's Rabelaisian humour is placed by the side of his predecessor's work, we see that, in spite of counter-reformations, the Protestant cause stood in a very different position in Fischart's day from that which it had occupied fifty years before. Fischart took his stand on the now firm union between humanism and Protestantism. His chief work, the *Affentheuerlich Naupengeheurliche Geschichtklitterung* (1575), a Germanization of the first book of Rabelais' satire, is a witty and ingenious monstrosity, a satirical comment on the life of the 16th century, not the virulent expression of party strife. The day of a personal and brutal type of satire was clearly over, and the writers of the later 16th century reverted more and more to the finer methods of the humanists. The satire of Bartholomaeus Ringwaldt (1530-1599) and of Georg Rollenhagen (1542-1609), author of the *Froschmeuseler* (1595), was more "literary" and less actual than even Fischart's.

On the whole, the form of literature which succeeded best in emancipating itself from the trammels of religious controversy in the 16th century was the drama. Protestantism proved favourable to its intellectual and literary development, and the humanists, who had always prided themselves on their imitations of Latin comedy, introduced into it a sense for form and proportion. The Latin school comedy in Germany was founded by J. Wimpfeling with his *Stylpho* (1470) and by J. Reuchlin with his witty adaptation of *Maître Patelin* in his *Henno* (1498). In the 16th century the chief writers of Latin dramas were Thomas Kirchmair or Naogeorgus (1511-1563), Caspar Brülow (1585-1627), and Nikodemus Frischlin (1547-1590), who also wrote dramas in the vernacular. The work of these men bears testimony in its form and its choice of subjects to the close relationship between Latin and German drama in the 16th century. One of the earliest focusses for a German drama inspired by the Reformation was Switzerland. In Basel, Pamphilus Gengenbach produced moralizing *Fastnachtsspiele* in 1515-1516; Niklas Manuel of Bern (1484-1530)—who has just been mentioned—employed the same type of play as a vehicle of pungent satire against the Mass and the sale of indulgences. But it was not long before the German drama benefited by the humanistic example: the *Parabell vam vorlorn Szohn* by Burkard Waldis (1527), the many dramas on the subject of *Susanna*—notably those of Sixt Birck (1532) and Paul Rebhun(1535)—and Frischlin's German plays are attempts to treat Biblical themes according to classic methods. In another of the important literary centres of the 16th century, however, in Nuremberg, the drama developed on indigenous lines. Hans Sachs (1494-1576), the Nuremberg cobbler and Meistersinger, the most productive writer of the age, went his own way; a voracious reader and an unwearied storyteller, he left behind him a vast literary legacy, embracing every form of popular literature from *Spruch* and *Schwank* to complicated *Meistergesang* and lengthy drama. He laid under contribution the rich Renaissance literature with which the humanistic translators had flooded Germany, and he became himself an ardent champion of the "Wittembergisch Nachtigall" Luther. But in the progressive movement of the German drama he played an even smaller role than his Swiss and Saxon contemporaries; for his tragedies and comedies are deficient in all dramatic qualities; they are only stories in dialogue. In the *Fastnachtsspiele*, where dramatic form is less essential than anecdotal point and brevity, he is to be seen at his best. Rich as the 16th century was in promise, the conditions for the development of a national drama were unfavourable. At the close of the century the influence of the English drama—brought to Germany by English actors—introduced the deficient dramatic and theatrical force into the humanistic and "narrative" drama which has just been considered. This is to be seen in the work of Jakob Ayrer (d. 1605) and Duke Henry Julius of Brunswick (1564-1613). But unfortunately these beginnings had hardly made themselves felt when the full current of the Renaissance was diverted across Germany, bringing in its train the Senecan tragedy. Then came the Thirty Years' War, which completely destroyed the social conditions indispensable for the establishment of a theatre at once popular and national.

The novel was less successful than the drama in extricating itself from satire and religious controversy. Fischart was too dependent on foreign models and too erratic—at one time adapting Rabelais, at another translating the old heroic romance of *Amadis de Gaula*—to create a national form of German fiction in the 16th century; the most important novelist was a much less talented writer, the Alsatian Meistersinger and dramatist Jörg Wickram (d. c. 1560), who has been already mentioned as the author of a popular collection of anecdotes, the *Rollwagenbüchlein*. His longer novels, *Der Knabenspiegel* (1554) and Der Goldfaden (1557), are in form, and especially in the importance they attach to psychological developments, the forerunners of the movement to which we owe the best works of German fiction in the 18th century. But Wickram stands alone. So inconsiderable, in fact, is the fiction of the Reformation age in Germany that we have to regard the old *Volksbücher* as its equivalent; and it is significant that of all the prose writings of this age, the book which affords the best insight into the temper and spirit of the Reformation was just one of these crude *Volksbücher*, namely, the famous story of the magician *Doctor Johann Faust*, published at Frankfort in 1587.

The 17th century in Germany presents a complete contrast to its predecessor; the fact that it was the century of the Thirty Years' War, which devastated the country, crippled the prosperity of the towns, and threw back by many generations the social development of the people, explains much, but it can hardly be held entirely responsible for the intellectual apathy, the slavery to foreign customs and foreign ideas, which stunted the growth of the nation. The freedom of Lutheranism degenerated into a paralyzing Lutheran orthodoxy which was as hostile to the "Freiheit eines Christenmenschen" as that Catholicism it had superseded; the idealism of the humanists degenerated in the same way into a dry, pedantic scholasticism which held the German mind in fetters until, at the very close of the century, Leibnitz set it free. Most disheartening of all, literature which in the 16th century had been so full of promise and had conformed with such aptitude to the new ideas, was in all its higher manifestations blighted by the dead hand of pseudo-classicism. The unkempt literature of the Reformation age admittedly stood in need of guidance and discipline, but the 17th century made the fatal mistake of trying to impose the laws and rules of Romance literatures on a people of a purely Germanic stock.

There were, however, some branches of German poetry which escaped this foreign influence. The church hymn, continuing the great Lutheran traditions, rose in the 17th century to extraordinary richness both in quality and quantity. Paul Gerhardt (1607-1676), the greatest German hymn-writer, was only one of many Lutheran pastors who in this age contributed to the German hymnal. On the Catholic side, Angelus Silesius, or Johann Scheffler (1624-1677) showed what a wealth of poetry lay in the mystic speculations of Jakob Boehme, the gifted shoemaker of Görlitz (1575-1624), and author of the famous *Aurora, oder Morgenröte im Aufgang* (1612); while Friedrich von Spee (1591-1635), another leading Catholic poet of the century, cultivated the pastoral allegory of the Renaissance. The revival of mysticism associated with Boehme gradually spread through the whole religious life of the 17th century, Protestant as well as Catholic, and in the more specifically Protestant form of pietism, it became, at the close of the period, a force of moment in the literary revival. Besides the hymn, the Volkslied, which amidst the struggles and confusion of the great war bore witness to a steadily growing sense of patriotism, lay outside the domain of the literary theorists and dictators, and developed in its own way. But all else—if we except certain forms of fiction, which towards the end of the 17th century rose into prominence—stood completely under the sway of the Latin Renaissance.

The first focus of the movement was Heidelberg, which had been a centre of humanistic learning in the sixteenth century. Here, under the leadership of J.W. Zincgref (1591-1635), a number of scholarly writers carried into practice that interest in the vernacular which had been shown a little earlier by the German translator of Marot, Paul Schede or Melissus, librarian in Heidelberg. The most important forerunner of Opitz was G.R. Weckherlin (1584-1653), a native of Württemberg who had spent the best part of his life in England; his *Oden und Gesänge* (1618-1619) ushered in the era of Renaissance poetry in Germany with a promise that was but indifferently fulfilled by his successors. Of these the greatest, or at least the most influential, was Martin Opitz (1597-1639). He was a native of Silesia and, as a student in Heidelberg, came into touch with Zincgref's circle; subsequently, in the course of a visit to Holland, a more definite trend was given to his ideas by the example of the Dutch poet and scholar, Daniel Heinsius. As a poet, Opitz experimented with every form of recognized Renaissance poetry from ode and epic to pastoral romance and Senecan drama; but his poetry is for the most part devoid of inspiration; and his extraordinary fame among his contemporaries would be hard to understand, were it not that in his *Buch von der deutschen Poeterey* (1624) he gave the German Renaissance its theoretical textbook. In this tract, in which Opitz virtually reproduced in German the accepted dogmas of Renaissance theorists like Scaliger and Ronsard, he not merely justified his own mechanical verse-making, but also gave Germany a law-book which regulated her literature for a hundred years.

The work of Opitz as a reformer was furthered by another institution of Latin origin, namely, literary societies modelled on the *Accademia della Crusca* in Florence. These societies, of which the chief were the *Fruchtbringende Gesellschaft* or *Palmenorden* (founded 1617), the *Elbschwanenorden* in Hamburg and the *Gekrönter Blumenorden an der Pegnitz or Gesellschaft der Pegnitzschäfer* in Nuremberg, were the centres of literary activity during the unsettled years of the war. Although they produced much that was trivial—such as the extraordinary *Nürnberger Trichter* (1647-1653) by G.P. Harsdörffer (1607-1658), a treatise which professed to turn out a fully equipped German poet in the space of six hours—these societies also did German letters an invaluable service by their attention to the language, one of their chief objects having been to purify the German language from foreign and un-German ingredients. J.G. Schottelius (1612-1676), for instance, wrote his epoch-making grammatical works with the avowed purpose of furthering the objects of the *Fruchtbringende Gesellschaft*. Meanwhile the

poetic centre of gravity in Germany had shifted from Heidelberg to the extreme north-east, to Königsberg, where a group of academic poets gave practical expression to the Opitzian theory. Chief among them was Simon Dach (1605-1659), a gentle, elegiac writer on whom the laws of the *Buch von der deutschen Poeterey* did not lie too heavily. He, like his more manly and vigorous contemporary Paul Fleming (1609-1640), showed, one might say, that it was possible to write good and sincere poetry notwithstanding Opitz's mechanical rules.

In the previous century the most advanced form of literature had been satire, and under the new conditions the satiric vein still proved most productive; but it was no longer the full-blooded satire of the Reformation, or even the rich and luxuriant satiric fancy of Fischart, which found expression in the 17th century. Satire pure and simple was virtually only cultivated by two Low German poets, J. Lauremberg (1590-1658) and J. Rachel (1618-1669), of whom at least the latter was accepted by the Opitzian school; but the satiric spirit rose to higher things in the powerful and scathing sermons of J.B. Schupp (1610-1661), an outspoken Hamburg preacher, and in the scurrilous wit of the Viennese monk Abraham a Sancta Clara (1644-1709), who had inherited some of his predecessor Murner's intellectual gifts. Best of all are the epigrams of the most gifted of all the Silesian group of writers, Friedrich von Logau (1604-1655). Logau's three thousand epigrams (*Deutsche Sinngedichte*, 1654) afford a key to the intellectual temper of the 17th century; they are the epitome of their age. Here are to be seen reflected the vices of the time, its aping of French customs and its contempt for what was national and German; Logau held up to ridicule the vain bloodshed of the war in the interest of Christianity, and, although he praised Opitz, he was far from prostrating himself at the dictator's feet. Logau is an epigrammatist of the first rank, and perhaps the most remarkable product of the Renaissance movement in Germany.

Opitz found difficulty in providing Germany with a drama according to the classic canon. He had not himself ventured beyond translations of Sophocles and Seneca, and Johann Rist (1607-1667) in Hamburg, one of the few contemporary dramatists, had written plays more in the manner of Duke Heinrich Julius of Brunswick than of Opitz. It was not until after the latter's death that the chief dramatist of the Renaissance movement came forward in the person of Andreas Gryphius (1616-1664). Like Opitz, Gryphius also was a Silesian, and a poet of no mean ability, as is to be seen from his lyric poetry; but his tragedies, modelled on the stiff Senecan pattern, suffered from the lack of a theatre, and from his ignorance of the existence of a more highly developed drama in France, not to speak of England. As it was, he was content with Dutch models. In the field of comedy, where he was less hampered by theories of dramatic propriety, he allowed himself to benefit by the freedom of the Dutch farce and the comic effects of the English actors in Germany; in his *Horribilicribrifax* and *Herr Peter Squentz*—the latter an adaptation of the comic scenes of the *Midsummer Night's Dream*—Gryphius has produced the best German plays of the 17th century.

The German novel of the 17th century was, as has been already indicated, less hampered by Renaissance laws than other forms of literature, and although it was none the less at the mercy of foreign influence, that influence was more varied and manifold in its character. *Don Quixote* had been partly translated early in the 17th century, the picaresque romance had found its way to Germany at a still earlier date; while H.M. Moscherosch (1601-1669) in his *Gesichte Philanders von Sittewald* (1642-1643) made the *Sueños* of Quevedo the basis for vivid pictures of the life of the time, interspersed with satire. The best German novel of the 17th century, *Der abenteurliche Simplicissimus* (1669) by H.J. Christoffel von Grimmelshausen (*c.* 1625-1676), is a picaresque novel, but one that owed little more than its form to the Spaniards. It is in great measure the autobiography of its author, and describes with uncompromising realism the social disintegration and the horrors of the Thirty Years' War. But this remarkable book stands alone; Grimmelshausen's other writings are but further contributions to the same theme, and he left no disciples worthy of carrying on the tradition he had created. Christian Weise (1642-1708), rector of the Zittau gymnasium, wrote a few satirical novels, but his realism and satire are too obviously didactic. He is seen to better advantage in his dramas, of which he wrote more than fifty for performance by his scholars.

The real successor of *Simplicissimus* in Germany was the English *Robinson Crusoe*, a novel which, on its appearance, was immediately translated into German (1721); it called forth an extraordinary flood of imitations, the so-called "Robinsonaden," the vogue of which is even still kept alive by *Der schweizerische Robinson* of J.R. Wyss (1812 ff.). With the exception of J.G. Schnabel's *Insel Felsenburg* (1731-1743), the literary value of these imitations is slight. They represented, however, a healthier and more natural development of fiction than the "galant" romances which were introduced in the train of the Renaissance movement, and cultivated by writers like Philipp von Zesen (1619-1689), Duke Anton Ulrich of Brunswick (1633-1714), A.H. Buchholtz (1607-1671), H.A. von Ziegler (1653-1697)—author of the famous *Asiatische Banise* (1688)—and D.C. von Lohenstein (1635-1683), whose *Arminius* (1689-1690) is on the whole the most promising novel of this group. The last mentioned writer and Christian Hofmann von

Hofmannswaldau (1617-1679) are sometimes regarded as the leaders of a "second Silesian school," as opposed to the first school of Opitz. As the cultivators of the bombastic and Euphuistic style of the Italians Guarini and Marini, and of the Spanish writer Gongora, Lohenstein and Hofmannswaldau touched the lowest point to which German poetry ever sank.

But this aberration of taste was happily of short duration. Although socially the recovery of the German people from the desolation of the war was slow and laborious, the intellectual life of Germany was rapidly recuperating under the influence of foreign thinkers. Samuel Pufendorf (1632-1694), Christian Thomasius (1655-1728), Christian von Wolff (1679-1754) and, above all, Gottfried Wilhelm Leibnitz (1646-1716), the first of the great German philosophers, laid the foundations of that system of rationalism which dominated Germany for the better part of the 18th century; while German religious life was strengthened and enriched by a revival of pietism, under mystic thinkers like Philipp Jakob Spener (1635-1705), a revival which also left its traces on religious poetry. Such hopeful signs of convalescence could not but be accompanied by an improvement in literary taste, and this is seen in the first instance in a substitution for the bombast and conceits of Lohehstein and Hofmannswaldau, of poetry on the stricter and soberer lines laid down by Boileau. The so-called "court poets" who opposed the second Silesian school, men like Rudolf von Canitz (1654-1699), Johann von Besser (1654-1729) and Benjamin Neukirch (1665-1729), were not inspired, but they had at least a certain "correctness" of taste; and from their midst sprang one gifted lyric genius, Johann Christian Günther (1695-1723), who wrote love-songs such as had not been heard in Germany since the days of the Minnesang. The methods of Hofmannswaldau had obtained considerable vogue in Hamburg, where the Italian opera kept the decadent Renaissance poetry alive. Here, however, the incisive wit of Christian Wernigke's (1661-1725) epigrams was an effective antidote, and Barthold Heinrich Brockes (1680-1747), a native of Hamburg, who had been deeply impressed by the appreciation of nature in English poetry, gave the artificialities of the Silesians their death-blow. But the influence of English literature was not merely destructive in these years; in the translations and imitations of the English *Spectator*, *Tatler* and *Guardian*—the so-called *moralische Wochenschriften*—it helped to regenerate literary taste, and to implant healthy moral ideas in the German middle classes.

The chief representative of the literary movement inaugurated by the Silesian "court poets" was Johann Christoph Gottsched (1700-1766), who between 1724 and 1740 succeeded in establishing in Leipzig, the metropolis of German taste, literary reforms modelled on the principles of French 17th-century classicism. He reformed and purified the stage according to French ideas, and provided it with a repertory of French origin; in his *Kritische Dichtkunst* (1730) he laid down the principles according to which good literature was to be produced and judged. As Opitz had reformed German letters with the help of Ronsard, so now Gottsched took his standpoint on the principles of Boileau as interpreted by contemporary French critics and theorists. With Gottsched, whose services in purifying the German language have stood the test of time better than his literary or dramatic reforms, the period of German Renaissance literature reaches its culmination and at the same time its close. The movement of the age advanced too rapidly for the Leipzig dictator; in 1740 a new epoch opened in German poetry and he was soon left hopelessly behind.

V. The Classical Period of Modern German Literature (1740-1832)

(*a*) *From the Swiss Controversy to the "Sturm und Drang."*—Between Opitz and Gottsched German literature passed successively through the various stages characteristic of all Renaissance literatures—from that represented by Trissino and the French Pléiade, by way of the aberrations of Marini and the *estilo culto*, to the *art poétique* of Boileau. And precisely as in France, the next advance was achieved in a battle between the "ancients" and the "moderns," the German "ancients" being represented by Gottsched, the "moderns" by the Swiss literary reformers, J.J. Bodmer (1698-1783) and J.J. Breitinger (1701-1776). The latter in his *Kritische Dichtkunst* (1739) maintained doctrines which were in opposition to Gottsched's standpoint in his treatise of the same name, and Bodmer supported his friend's initiative; a pamphlet war ensued between Leipzig and Zürich, with which in 1740-1741 the classical period of modern German literature may be said to open. The Swiss, men of little originality, found their theories in the writings of Italian and English critics; and from these they learned how literature might be freed from the fetters of pseudo-classicism. Basing their arguments on Milton's *Paradise Lost*, which Bodmer had translated into prose (1732), they demanded room for the play of genius and inspiration; they insisted that the imagination should not be hindered in its attempts to rise above the world of reason and common sense. Their victory was due, not to the skill with which they presented their arguments, but to the fact that literature itself was in need of greater freedom. It was in fact a triumph, not of personalities or of leaders, but of ideas. The effects of the controversy are to be seen in a group of Leipzig writers of Gottsched's own school, the *Bremer Beiträger* as they were called after their literary organ. These men—

C.F. Gellert (1715-1769), the author of graceful fables and tales in verse, G.W. Rabener (1714-1771), the mild satirist of Saxon provinciality, the dramatist J. Elias Schlegel (1719-1749), who in more ways than one was Lessing's forerunner, and a number of minor writers—did not set themselves up in active opposition to their master, but they tacitly adopted many of the principles which the Swiss had advocated. And in the *Bremer Beiträge* there appeared in 1748 the first instalment of an epic by F.G. Klopstock (1724-1803), *Der Messias*, which was the best illustration of that lawlessness against which Gottsched had protested. More effectively than Bodmer's dry and uninspired theorizing, Klopstock's *Messias*, and in a still higher degree, his *Odes*, laid the foundations of modern German literature in the 18th century. His immediate followers, it is true, did not help to advance matters; Bodmer and J.K. Lavater (1741-1801), whose "physiognomic" investigations interested Goethe at a later date, wrote dreary and now long forgotten epics on religious themes. Klopstock's rhapsodic dramas, together with Macpherson's *Ossian*, which in the 'sixties awakened a widespread enthusiasm throughout Germany, were responsible for the so-called "bardic" movement; but the noisy rhapsodies of the leaders of this movement, the "bards" H.W. von Gerstenberg (1737-1823), K.F. Kretschmann (1738-1809) and Michael Denis (1729-1800), had little of the poetic inspiration of Klopstock's *Odes*.

The indirect influence of Klopstock as the first inspired poet of modern Germany and as the realization of Bodmer's theories can, however, hardly be over-estimated. Under Frederick the Great, who, as the docile pupil of French culture, had little sympathy for unregulated displays of feeling, neither Klopstock nor his imitators were in favour in Berlin, but at the university of Halle considerable interest was taken in the movement inaugurated by Bodmer. Here, before Klopstock's name was known at all, two young poets, J.I. Pyra (1715-1744) and S.G. Lange (1711-1781), wrote *Freundschaftliche Lieder* (1737), which were direct forerunners of Klopstock's rhymeless lyric poetry; and although the later Prussian poets, J.W.L. Gleim (1719-1803), J.P. Uz (1720-1796) and J.N. Götz (1721-1781), who were associated with Halle, and K.W. Ramler (1725-1798) in Berlin, cultivated mainly the Anacreontic and the Horatian ode—artificial forms, which kept strictly within the classic canon—yet Friedrich von Hagedorn (1708-1754) in Hamburg showed to what perfection even the Anacreontic and the lighter *vers de société* could be brought. The Swiss physiologist Albrecht von Haller (1708-1777) was the first German poet to give expression to the beauty and sublimity of Alpine scenery (*Die Alpen*, 1734), and a Prussian officer, Ewald Christian von Kleist (1715-1759), author of *Der Frühling* (1749), wrote the most inspired nature-poetry of this period. Klopstock's supreme importance lay, however, in the fact that he was a forerunner of the movement of *Sturm und Drang*. But before turning to that movement we must consider two writers who, strictly speaking, also belong to the age under consideration—Lessing and Wieland.

As Klopstock had been the first of modern Germany's inspired poets, so Gotthold Ephraim Lessing (1729-1781) was the first critic who brought credit to the German name throughout Europe. He was the most liberal-minded exponent of 18th-century rationalism. Like his predecessor Gottsched, whom he vanquished more effectually than Bodmer had done, he had unwavering faith in the classic canon, but "classic" meant for him, as for his contemporary, J.J. Winckelmann (1717-1768), Greek art and literature, and not the products of French pseudo-classicism, which it had been Gottsched's object to foist on Germany. He went, indeed, still further, and asserted that Shakespeare, with all his irregularities, was a more faithful observer of the spirit of Aristotle's laws, and consequently a greater poet, than were the French classic writers. He looked to England and not to France for the regeneration of the German theatre, and his own dramas were pioneer-work in this direction. *Miss Sara Sampson* (1755) is a *bürgerliche Tragödie* on the lines of Lillo's *Merchant of London, Minna von Barnhelm* (1767), a comedy in the spirit of Farquhar; in *Emilia Galotti* (1772), again with English models in view, he remoulded the "tragedy of common life" in a form acceptable to the *Sturm und Drang*; and finally in *Nathan der Weise* (1779) he won acceptance for iambic blank verse as the medium of the higher drama. His two most promising disciples—J.F. von Cronegk (1731-1758), and J.W. von Brawe (1738-1758)—unfortunately died young, and C.F. Weisse (1726-1804) was not gifted enough to advance the drama in its literary aspects. Lessing's name is associated with Winckelmann's in *Laokoon* (1766), a treatise in which he set about defining the boundaries between painting, sculpture and poetry, and with those of the Jewish philosopher, Moses Mendelssohn (1729-1786) and the Berlin bookseller C.F. Nicolai (1733-1811) in the famous *Literaturbriefe*. Here Lessing identified himself with the best critical principles of the rationalistic movement—principles which, in the later years of his life, he employed in a fierce onslaught on Lutheran orthodoxy and intolerance.

To the widening and deepening of the German imagination C.M. Wieland (1733-1813) also contributed, but in a different way. Although no enemy of pseudo-classicism, he broke with the stiff dogmatism of Gottsched and his friends, and tempered the pietism of Klopstock by introducing the Germans to the lighter poetry of the south of Europe. With the exception of his fairy epic *Oberon* (1780), Wieland's work has fallen into neglect; he did, however, excellent

service to the development of German prose fiction with his psychological novel, *Agathon* (1766-1767), which may be regarded as a forerunner of Goethe's *Wilhelm Meister*, and with his humorous satire *Die Abderiten* (1774). Wieland had a considerable following, both among poets and prose writers; he was particularly looked up to in Austria, towards the end of the 18th century, where the literary movement advanced more slowly than in the north. Here Aloys Blumauer (1755-1789) and J.B. von Alxinger (1755-1797) wrote their travesties and epics under his influence. In Saxony, M.A. von Thümmel (1738-1817) showed his adherence to Wieland's school in his comic epic in prose, *Wilhelmine* (1764), and in the general tone of his prose writings; on the other hand, K.A. Kortum (1745-1824), author of the most popular comic epic of the time, *Die Jobsiade* (1784), was but little influenced by Wieland. The German novel owed much to the example of *Agathon*, but the groundwork and form were borrowed from English models; Gellert had begun by imitating Richardson in his *Schwedische Gräfin* (1747-1748), and he was followed by J.T. Hermes (1738-1821), by Wieland's friend Sophie von Laroche (1730-1807), by A. von Knigge (1752-1796) and J.K.A. Musäus (1735-1787), the last mentioned being, however, best known as the author of a collection of *Volksmärchen* (1782-1786). Meanwhile a rationalism, less materialistic and strict than that of Wolff, was spreading rapidly through educated middle-class society in Germany. Men like Knigge, Moses Mendelssohn, J.G. Zimmermann (1728-1795), T.G. von Hippel (1741-1796), Christian Garve (1742-1798), J.J. Engel (1741-1802), as well as the educational theorists J.B. Basedow (1723-1790) and J.H. Pestalozzi (1746-1827), wrote books and essays on "popular philosophy" which were as eagerly read as the *moralische Wochenschriften* of the preceding epoch; and with this group of writers must also be associated the most brilliant of German 18th-century satirists, G.C. Lichtenberg (1742-1799).

Such was the *milieu* from which sprang the most advanced pioneer of the classical epoch of modern German literature, J.G. Herder (1744-1803). The transition from the popular philosophers of the *Aufklärung* to Herder was due in the first instance to the influence of Rousseau; and in Germany itself that transition is represented by men like Thomas Abbt (1738-1766) and J.G. Hamann (1730-1788). The revolutionary nature of Herder's thought lay in that writer's antipathy to hard and fast systems, to laws imposed upon genius; he grasped, as no thinker before him, the idea of historical evolution. By regarding the human race as the product of a slow evolution from primitive conditions, he revolutionized the methods and standpoint of historical science and awakened an interest—for which, of course, Rousseau had prepared the way—in the early history of mankind. He himself collected and published the *Volkslieder* of all nations (1778-1779), and drew attention to those elements in German life and art which were, in the best and most precious sense, national—elements which his predecessors had despised as inconsistent with classic formulae and systems. Herder is thus not merely the forerunner, but the actual founder of the literary movement known as *Sturm und Drang*. New ground was broken in a similar way by a group of poets, who show the results of Klopstock's influence on the new literary movement: the Göttingen "Bund" or "Hain," a number of young students who met together in 1772, and for several years published their poetry in the *Göttinger Musenalmanach*. With the exception of the two brothers, Ch. zu Stolberg (1748-1821) and F.L. zu Stolberg (1750-1819), who occupied a somewhat peculiar position in the "Bund," the members of this coterie were drawn from the peasant class of the lower *bourgeoisie*; J.H. Voss (1751-1826), the leader of the "Bund," was a typical North German peasant, and his idyll, *Luise* (1784), gives a realistic picture of German provincial life. L.H.C. Hölty (1748-1776) and J.M. Miller (1750-1814), again, excelled in simple lyrics in the tone of the *Volkslied*. Closely associated with the Göttingen group were M. Claudius (1740-1815), the *Wandsbecker Bote*—as he was called after the journal he edited—an even more unassuming and homely representative of the German peasant in literature than Voss, and G.A. Bürger (1748-1794) who contributed to the *Göttinger Musenalmanach* ballads, such as the famous Lenore (1774), of the very first rank. These ballads were the best products of the Göttingen school, and, together with Goethe's Strassburg and Frankfort songs, represent the highest point touched by the lyric and ballad poetry of the period.

But the Göttingen "Bund" stood somewhat aside from the main movement of literary development in Germany; it was only a phase of *Sturm und Drang*, and quieter, less turbulent than that on which Goethe had set the stamp of his personality. Johann Wolfgang Goethe (1749-1832) had, as a student in Leipzig (1765-1768), written lyrics in the Anacreontic vein and dramas in alexandrines. But in Strassburg, where he went to continue his studies in 1770-1771, he made the personal acquaintance of Herder, who won his interest for the new literary movement. Herder imbued him with his own ideas of the importance of primitive history and Gothic architecture and inspired him with a pride in German nationality; Herder convinced him that there was more genuine poetry in a simple Volkslied than in all the ingenuity of the German imitators of Horace or Anacreon; above all, he awakened his enthusiasm for Shakespeare. The pamphlet *Von deutscher Art und Kunst* (1773), to which, besides Goethe and Herder, the historian Justus Möser (1720-1794) also contributed, may be regarded as the

manifesto of the *Sturm und Drang*. The effect on Goethe of the new ideas was instantaneous; they seemed at once to set his genius free, and from 1771 to 1775 he was extraordinarily fertile in poetic ideas and creations. His *Götz von Berlichingen* (1771-1773), the first drama of the *Sturm und Drang*, was followed within a year by the first novel of the movement, *Werthers Leiden* (1774); he dashed off *Clavigo* and *Stella* in a few weeks in 1774 and 1775, and wrote a large number of *Singspiele*, dramatic satires and fragments—including *Faust* in its earliest form (the so-called *Urfaust*)—not to mention love-songs which at last fulfilled the promise of Klopstock. Goethe's lyrics were no less epoch-making than his first drama and novel, for they put an end to the artificiality which for centuries had fettered German lyric expression. In all forms of literature he set the fashion to his time; the Shakespearian restlessness of *Götz von Berlichingen* found enthusiastic imitators in J.M.R. Lenz (1751-1792), whose *Anmerkungen übers Theater* (1774) formulated theoretically the laws, or defiance of laws, of the new drama, in F.M. von Klinger (1752-1831), J.A. Leisewitz (1752-1806), H.L. Wagner (1747-1779) and Friedrich Müller, better known as Maler Müller (1749-1825): The dramatic literature of the *Sturm und Drang* was its most characteristic product—indeed, the very name of the movement was borrowed from a play by Klinger; it was inspired, as *Götz von Berlichingen* had been, by the desire to present upon the stage figures of Shakespearian grandeur impelled and tortured by gigantic passions, all considerations of plot, construction and form being regarded as subordinate to the development of character. The fiction of the *Sturm und Drang*, again, was in its earlier stages dominated by *Werthers Leiden*, as may be seen in the novels of F.H. Jacobi (1743-1819) and J.M. Miller, who has been already mentioned. Later, in the hands of J.J.W. Heinse (1749-1803), author of *Ardinghello* (1787), Klinger, K. Ph. Moritz (1757-1793), whose *Anton Reiser* (1785) clearly foreshadows *Wilhelm Meister*, it reflected not merely the sentimentalism, but also the philosophic and artistic ideas of the period.

With the production of *Die Räuber* (1781) by Johann Friedrich Schiller (1759-1805), the drama of the *Sturm und Drang* entered upon a new development. Although hardly less turbulent in spirit than the work of Klinger and Leisewitz, Schiller's tragedy was more skilfully adapted to the exigencies of the theatre; his succeeding dramas, *Fiesco* and *Kabale und Liebe*, were also admirable stage-plays, and in *Don Carlos* (1787) he abandoned prose for the iambic blank verse which Lessing had made acceptable in *Nathan der Weise*. The "practical" character of the new drama is also to be seen in the work of Schiller's contemporary, O. von Gemmingen (1755-1836), the imitator of Diderot, in the excellent domestic dramas of the actors F.L. Schröder (1744-1816) and A.W. Iffland (1759-1814), and even in the popular medieval plays, the so-called *Ritterdramen* of which *Götz von Berlichingen* was the model. Germany owes to the *Sturm und Drang* her national theatre; permanent theatres were established in these years at Hamburg, Mannheim, Gotha, and even at Vienna, which, as may be seen from the dramas of C.H. von Ayrenhoff (1733-1819), had hardly then advanced beyond Gottsched's ideal of a national literature. The Hofburgtheater of Vienna, the greatest of all the German stages, was virtually founded in 1776.

(*b*) *German Classical Literature.*—The energy of the *Sturm und Drang*, which was essentially iconoclastic in its methods, soon exhausted itself. For Goethe this phase in his development came to an end with his departure for Weimar in 1775, while, after writing *Don Carlos* (1787), Schiller turned from poetry to the study of history and philosophy. These subjects occupied his attention almost exclusively for several years, and not until the very close of the century did he, under the stimulus of Goethe's friendship, return to the drama. The first ten years of Goethe's life in Weimar were comparatively unproductive; he had left the *Sturm und Drang* behind him; its developments, for which he himself had been primarily responsible, were distasteful to him; and he had not yet formed a new creed. Under the influence of the Weimar court, where classic or even pseudo-classic tastes prevailed, he was gradually finding his way to a form of literary art which should reconcile the humanistic ideals of the 18th century with the poetic models of ancient Greece. But he did not arrive at clearness in his ideas until after his sojourn in Italy (1786-1788), an episode of the first importance for his mental development. Italy was, in the first instance, a revelation to Goethe of the antique; he had gone to Italy to find realized what Winckelmann had taught, and here he conceived that ideal of a classic literature, which for the next twenty years dominated German literature and made Weimar its metropolis. In Italy he gave *Iphigenie auf Tauris* (1787) its final form, he completed *Egmont* (1788)—like the exactly contemporary *Don Carlos* of Schiller, a kind of bridge from *Sturm und Drang* to classicism—and all but finished *Torquato Tasso* (1790). *Wilhelm Meisters Lehrjahre* (1795-1796) bears testimony to the clear and decisive views which he had acquired on all questions of art and of the practical conduct of life.

Long before *Wilhelm Meister* appeared, however, German thought and literature had arrived at that stability and self-confidence which are the most essential elements in a great literary period. In the year of Lessing's death, 1781, Immanuel Kant (1724-1804), the great philosopher, had published his *Kritik der reinen Vernunft*, and this, together with the two later treatises, *Kritik der praktischen Vernunft* (1788) and *Kritik der Urteilskraft* (1790), placed the

Germans in the front rank of thinking nations. Under the influence of Kant, Schiller turned from the study of history to that of philosophy and more especially aesthetics. His philosophic lyrics, his treatises on *Anmut und Würde*, on the *Ästhetische Erziehung des Menschen* (1795), and *Über naive und sentimentalische Dichtung* (1795) show, on the philosophic and the critical side, the movement of the century from the irresponsible subjectivity of *Sturm und Drang* to the calm idealism of classic attainment. In the same way, German historical writing had in these years, under the leadership of men like Justus Möser, Thomas Abbt, I. Iselin, F.C. Schlosser, Schiller himself and, greatest of all, Johannes von Müller (1752-1809), advanced from disconnected, unsystematic chronicling to a clearly thought-out philosophic and scientific method. J.G.A. Forster (1754-1794), who had accompanied Cook round the world, and Alexander von Humboldt (1769-1859), gave Germany models of clear and lucid descriptive writing. In practical politics and economics, when once the unbalanced vagaries of undiluted Rousseauism had fallen into discredit, Germany produced much wise and temperate thinking which prevented the spread of the French Revolution to Germany, and provided a practical basis on which the social and political fabric could be built up anew, after the Revolution had made the old régime impossible in Europe. Men like Wilhelm von Humboldt (1767-1835) and the philosopher J.G. Fichte (1762-1814) were, in two widely different spheres, representative of this type of intellectual eminence.

Meanwhile, in 1794, that friendship between Goethe and Schiller had begun, which lasted, unbroken, until the younger poet's death in 1805. These years mark the summit of Goethe and Schiller's classicism, and the great epoch of Weimar's history as a literary focus. Schiller's treatises had provided a theoretical basis; his new journal, *Die Horen*, might be called the literary organ of the movement—although in this respect the subsequent *Musenalmanach*, in which the two poets published their magnificent ballad poetry, had more value. Goethe, as director of the ducal theatre, could to a great extent control dramatic production in Germany. Under his encouragement, Schiller turned from philosophy to poetry and wrote the splendid series of classic dramas beginning with the trilogy of *Wallenstein* and closing with *Wilhelm Tell* and the fragment of *Demetrius*; while to Goethe we owe, above all, the epic of *Hermann und Dorothea*. Less important were the latter's severely classical plays *Die natürliche Tochter* and *Pandora*; but it must not be forgotten that it was chiefly owing to Schiller's stimulus that in those years Goethe brought the first part of *Faust* (1808) to a conclusion.

Although acknowledged leaders of German letters, Goethe and Schiller had considerable opposition to contend with. The *Sturm und Drang* had by no means exhausted itself, and the representatives of the once dominant rationalistic movement were particularly arrogant and overbearing. The literature associated with both *Sturm und Drang* and rationalism was at this period palpably decadent; no comparison could be made between the magnificent achievements of Goethe and Schiller, or even of Herder and Wieland with the "family" dramas of Iffland, still less with the extraordinarily popular plays of A. von Kotzebue (1761-1819), or with those bustling medieval *Ritterdramen*, which were especially cultivated in south Germany. There is a wide gap between Moritz's *Anton Reiser* or the philosophic novels which Klinger wrote in his later years, and Goethe's *Meister*; nor can the once so fervently admired novels of Jean Paul Richter (1763-1825) take a very high place. Neither the fantastic humour nor the penetrating thoughts with which Richter's books are strewn make up for their lack of artistic form and interest; they are essentially products of *Sturm und Drang*. Lastly, in the province of lyric and epic poetry, it is impossible to regard poets like the gentle F. von Matthisson (1761-1831), or the less inspired G.L. Kosegarten (1758-1818) and C.A. Tiedge (1752-1841), as worthily seconding the masterpieces of Goethe and Schiller. Thus when we speak of the greatness of Germany's classical period, we think mainly of the work of her two chief poets; the distance that separated them from their immediate contemporaries was enormous. Moreover, at the very close of the 18th century a new literary movement arose in admitted opposition to the classicism of Weimar, and to this movement, which first took definite form in the Romantic school, the sympathies of the younger generation turned. Just as in the previous generation the *Sturm und Drang* had been obliged to make way for a return to classic and impersonal principles of literary composition, so now the classicism of Goethe and Schiller, which had produced masterpieces like *Wallenstein* and *Hermann und Dorothea*, had to yield to a revival of individualism and subjectivity, which, in the form of Romanticism, profoundly influenced the literature of the whole 19th century.

(*c*) *The Romantic Movement.*—The first Romantic school, however, was founded, not as a protest against the classicism of Weimar, with which its leaders were in essential sympathy, but against the shallow, utilitarian rationalism of Berlin. Ludwig Tieck (1773-1853), a leading member of the school, was in reality a belated *Stürmer und Dränger*, who in his early years had chafed under the unimaginative tastes of the Prussian capital, and sought for a positive faith to put in their place. Friedrich Hölderlin (1770-1843), one of the most gifted poets of this age, demonstrates no less clearly than Tieck the essential affinity between *Sturm und Drang* and Romanticism; he, too, forms a bridge from the one individualistic movement to the other.

The theoretic basis of Romanticism was, however, established by the two brothers, August Wilhelm and Friedrich Schlegel (1767-1845 and 1772-1829), who, accepting, in great measure, Schiller's aesthetic conclusions, adapted them to the needs of their own more subjective attitude towards literature. While Schiller, like Lessing before him, insisted on the critic's right to sit in judgment according to a definite code of principles, these Romantic critics maintained that the first duty of criticism was to understand and appreciate; the right of genius to follow its natural bent was sacred. The *Herzensergiessungen eines kunstliebenden Klosterbruders* by Tieck's school-friend W.H. Wackenroder (1773-1798) contained the Romantic art-theory, while the hymns and fragmentary novels of Friedrich von Hardenberg (known as Novalis, 1772-1801), and the dramas and fairy tales of Tieck, were the characteristic products of Romantic literature. The universal sympathies of the movement were exemplified by the many admirable translations—greatest of all, Schlegel's *Shakespeare* (1797-1810)—which were produced under its auspices. Romanticism was essentially conciliatory in its tendencies, that is to say, it aimed at a reconciliation of poetry with other provinces of social and intellectual life; the hard and fast boundaries which the older critics had set up as to what poetry might and might not do, were put aside, and the domain of literature was regarded as co-extensive with life itself; painting and music, philosophy and ethics, were all accepted as constituent elements of or aids to Romantic poetry. Fichte, and to a much greater extent, F.W.J. von Schelling (1775-1854) were the exponents of the Romantic doctrine in philosophy, while the theologian F.E.D. Schleiermacher (1768-1834) demonstrated how vital the revival of individualism was for religious thought.

The Romantic school, whose chief members were the brothers Schlegel, Tieck, Wackenroder and Novalis, was virtually founded in 1798, when the Schlegels began to publish their journal the *Athenaeum*; but the actual existence of the school was of very short duration. Wackenroder and Novalis died young, and by the year 1804 the other members were widely separated. Two years later, however, another phase of Romanticism became associated with the town of Heidelberg. The leaders of this second or younger Romantic school were K. Brentano (1778-1842), L.A. von Arnim (1781-1831) and J.J. von Görres (1776-1848), their organ, corresponding to the *Athenaeum*, was the *Zeitung für Einsiedler*, or *Tröst-Einsamkeit*, and their most characteristic production the collection of *Volkslieder*, published under the title *Des Knaben Wunderhorn* (1805-1808). Compared with the earlier school the Heidelberg writers were more practical and realistic, more faithful to nature and the commonplace life of everyday. They, too, were interested in the German past and in the middle ages, but they put aside the idealizing glasses of their predecessors and kept to historic truth; they wrote historical novels, not stories of an imaginary medieval world as Novalis had done, and when they collected *Volkslieder* and *Volksbücher*, they refrained from decking out the simple tradition with musical effects, or from heightening the poetic situation by "Romantic irony." Their immediate influence on German intellectual life was consequently greater; they stimulated and deepened the interest of the German people in their own past; and we owe to them the foundations of the study of German philology and medieval literature, both the brothers Jakob and Wilhelm Grimm (1785-1863 and 1786-1859) having been in touch with this circle in their early days. Again, the Heidelberg poets strengthened the national and patriotic spirit of their people; they prepared the way for the rising against Napoleon, which culminated in the year 1813, and produced that outburst of patriotic song, associated with E.M. Arndt (1769-1860), K. Th. Körner (1791-1813) and M. von Schenkendorf (1783-1817).

The subsequent history of Romanticism stands in close relation to the Heidelberg school, and when, about 1809, the latter broke up, and Arnim and Brentano settled in Berlin, the Romantic movement followed two clearly marked lines of development, one north German, the other associated with Württemberg. The Prussian capital, hotbed of rationalism as it was, had, from the first, been intimately associated with Romanticism; the first school had virtually been founded there, and north Germans, like Heinrich von Kleist (1777-1811) and Zacharias Werner (1768-1823)had done more for the development of the Romantic drama than had the members of either Romantic school. These men, and more especially Kleist, Prussia's greatest dramatic poet, showed how the capricious Romantic ideas could be brought into harmony with the classic tradition established by Schiller, how they could be rendered serviceable to the national theatre. At the same time, Berlin was not a favourable soil for the development of Romantic ideas, and the circle of poets which gathered round Arnim and Brentano there, either themselves demonstrated the decadence of these ideas, or their work contained elements which in subsequent years hastened the downfall of the movement. Friedrich de la Motte Fouqué (1777-1843), for instance, shows how easy it was for the medieval tastes of the Romanticists to degenerate into mediocre novels and plays, hardly richer in genuine poetry than were the productions of the later *Sturm und Drang*; and E.T.A. Hoffmann (1776-1822), powerful genius though he was, cultivated with preference in his stories, a morbid super-naturalism, which was only a decadent form of the early Romantic delight in the world of fairies and spirits. The lyric was less sensitive to baleful influences, but even here the north

German Romantic circle could only point to one lyric poet of the first rank, J. von Eichendorff (1788-1857); while in the poetry of A. von Chamisso (1781-1838) the volatile Romantic spirituality is too often wanting. Others again, like Friedrich Rückert (1788-1866), sought the inspiration which Romanticism was no longer able to give, in the East; still another group, of which Wilhelm Müller (1794-1827) is the chief representative, followed Byron's example and awakened German sympathy for the oppressed Greeks and Poles.

Apart from Eichendorff, the vital lyric poetry of the third and last phase of Romanticism must be looked for in the Swabian school, which gathered round Uhland. Ludwig Uhland (1787-1862) was himself a disciple of the Heidelberg poets, and, in his lyrics and especially in his ballads, he succeeded in grafting the lyricism of the Romantic school on to the traditions of German ballad poetry which had been handed down from Bürger, Schiller and Goethe. But, as was the case with so many other disciples of the Heidelberg Romanticists, Uhland's interest in the German past was the serious interest of the scholar rather than the purely poetic interest of the earlier Romantic poets. The merit of the Swabian circle, the chief members of which were J. Kerner (1786-1862), G. Schwab (1792-1850), W. Waiblinger (1804-1830), W. Hauff (1802-1827) and, most gifted of all, E. Mörike (1804-1875) was that these writers preserved the Romantic traditions from the disintegrating influences to which their north German contemporaries were exposed. They introduced few new notes into lyric poetry, but they maintained the best traditions intact, and when, a generation later, the anti-Romantic movement of "Young Germany" had run its course, it was to Württemberg Germany looked for a revival of the old Romantic ideas.

Meanwhile, in the background of all these phases of Romantic evolution, through which Germany passed between 1798 and 1832, stands the majestic and imposing figure of Goethe. Personally he had in the early stages of the movement been opposed to that reversion to subjectivity and lawlessness which the first Romantic school seemed to him to represent; to the end of his life he regarded himself as a "classic," not a "romantic" poet. But, on the other hand, he was too liberal-minded a thinker and critic to be oblivious to the fruitful influence of the new movement. Almost without exception he judged the young poets of the new century fairly, and treated them sympathetically and kindly; he was keenly alive to the new—and for the most part "unclassical"—development of literature in England, France and Italy; and his own published work, above all, the first part of *Faust* (1808), *Die Wahlverwandtschaften* (1809), *Dichtung und Wahrheit* (1811-1814, a final volume in 1833), *Westöstlicher Divan* (1819), *Wilhelm Meisters Wanderjahre* (1821-1829) and the second part of *Faust* (published in 1832 after the poet's death), stood in no antagonism to the Romantic ideas of their time. One might rather say that Goethe was the bond between the two fundamental literary movements of the German classical age; that his work achieved that reconciliation of "classic" and "romantic" which, rightly regarded, was the supreme aim of the Romantic school itself.

VI. German Literature since Goethe (1832-1906)

(*a*) *Young Germany*.—With Goethe's death a great age in German poetry came to a close. Long before 1832 Romanticism had, as we have seen, begun to lose ground, and the July revolution of 1830, the effects of which were almost as keenly felt in Germany as in France, gave the movement its death-blow. Meanwhile the march of ideas in Germany itself had not been favourable to Romanticism. Schelling had given place to G. W.F. Hegel (1770-1831), now the dominant force in German philosophy, and the Hegelian metaphysics proved as unfruitful an influence on literature as that of Fichte and Schelling had been fruitful. The transference of Romantic ideas to the domain of practical religion and politics had proved reactionary in its effects; Romanticism became the cloak for a kind of Neo-catholicism, and Romantic politics, as enunciated by men like F. von Gentz (1764-1832) and Adam Müller (1779-1829), served as an apology for the Metternich régime in Austria. Only at the universities—in Göttingen, Heidelberg and Berlin—did the movement continue, in the best sense, to be productive; German philology, German historical science and German jurisprudence benefited by Romantic ideas, long after Romantic poetry had fallen into decay. The day of Romanticism was clearly over; but a return to the classic and humanitarian spirit of the 18th century was impossible. The social condition of Europe had been profoundly altered by the French Revolution; the rise of industrialism had created new economic problems, the march of science had overturned old prejudices. And in a still higher degree were the ideas which lay behind the social upheaval of the July revolution incompatible with a reversion in Germany to the conditions of Weimar classicism. There was, moreover, no disguising the fact that Goethe himself did not stand high with the younger generation of German writers who came into power after his death.

"Young Germany" did not form a school in the sense in which the word was used by the early Romanticists; the bond of union was rather the consequence of political persecution. In December 1835 the German "Bund" issued a decree suppressing the writings of the "literary

school" known as "Young Germany," and mentioned by name Heinrich Heine, Karl Gutzkow, Ludolf Wienbarg, Theodor Mundt and Heinrich Laube. Of these men, Heine (1797-1856) was by far the most famous. He had made his reputation in 1826 and 1827 with *Die Harzreise* and *Das Buch der Lieder*, both of which books show how deeply he was immersed in the Romantic traditions. But Heine felt perhaps more acutely than any other man of his time how the ground was slipping away from beneath his feet; he repudiated the Romantic movement and hailed the July revolution as the first stage in the "liberation of humanity"; while ultimately he sought in France the freedom and intellectual stimulus which Germany withheld from him. Heine suffered from having been born in an age of transition; he was unable to realize in a wholehearted way all that was good in the new movement, which he had embraced so warmly; his optimism was counteracted by doubts as to whether, after all, life had not been better in that old Romantic Germany of his childhood for which, to the last, he retained so warm an affection. Personal disappointments and unhappiness added to the bitterness of Heine's nature, and the supremely gifted lyric poet and the hardly less gifted satirist were overshadowed by the cynic from whose biting wit nothing was safe.

Heine's contemporary and—although he was not mentioned in the decree against the school—fellow-fighter, Ludwig Börne (1786-1837), was a more characteristic representative of the "Young German" point of view; for he was free from Romantic prejudices. Börne gave vent to his enthusiasm for France in eloquent *Briefe aus Paris* (1830-1833), which form a landmark of importance in the development of German prose style. With Karl Gutzkow (1811-1878), who was considerably younger than either Heine or Börne, the more positive aspects of the "Young German" movement begin to be apparent. He, too, had become a man of letters under the influence of the July revolution, and with an early novel, *Wally, die Zweiflerin* (1835), which was then regarded as atheistic and immoral, he fought in the battle for the new ideas. His best literary work, however, was the comedies with which he enriched the German stage of the 'forties, and novels like *Die Ritter vom Geiste* (1850-1851), and *Der Zauberer von Rom* (1858-1861), which have to be considered in connexion with the later development of German fiction. Heinrich Laube (1806-1884), who, as the author of lengthy social novels, and *Reisenovellen* in the style of Heine's *Reisebilder*, was one of the leaders of the new movement, is now only remembered as Germany's greatest theatre-director. Laube's connexion (1850-1867) with the Burgtheater of Vienna forms one of the most brilliant periods in the history of the modern stage. Heine and Börne, Gutzkow and Laube—these were the leading spirits of "Young Germany"; in their train followed a host of lesser men, who to the present generation are hardly even names. In the domain of scholarship and learning the "Young German" movement was associated with the supremacy of Hegelianism, the leading spirits being D.F. Strauss (1808-1874), author of the *Leben Jesu* (1835), the historians G.G. Gervinus (1805-1871) and W. Menzel (1798-1873), and the philosopher L.A. Feuerbach (1804-1872), who, although a disciple of Hegel, ultimately helped to destroy the latter's influence.

Outside the immediate circle of "Young Germany," other tentative efforts were made to provide a substitute for the discredited literature of Romanticism. The historical novel, for instance, which Romanticists like Arnim had cultivated, fell at an early date under the influence of Sir Walter Scott; Wilhelm Hauff, Heinrich Zschokke (1771-1848) and K. Spindler (1796-1855) were the most prominent amidst the many imitators of the Scottish novelist. The drama, again, which since Kleist and Werner had been without definite principles, was, partly under Austrian influence, finding its way back to a condition of stability. In Germany proper, the men into whose hands it fell were, on the one hand, undisciplined geniuses such as C.D. Grabbe (1801-1836), or, on the other, poets with too little theatrical blood in their veins like K.L. Immermann (1796-1840), or with too much, like E. von Raupach (1784-1852), K. von Holtei (1798-1880) and Adolf Müllner (1774-1829)—the last named being the chief representative of the so-called *Schicksalstragödie*. In those years the Germans were more seriously interested in their opera, which, under C.M. Weber, H.A. Marschner, A. Lortzing and O. Nicolai, remained faithful to the Romantic spirit. In Austria, however, the drama followed lines of its own; here, at the very beginning of the century, H.J. von Collin (1771-1811) attempted in *Regulus* and other works to substitute for the lifeless pseudo-classic tragedy of Ayrenhoff the classic style of Schiller. His attempt is the more interesting, as the long development that had taken place in Germany between Gottsched and Schiller was virtually unrepresented in Austrian literature. M. von Collin (1779-1824), a younger brother of H.J. von Collin, did a similar service for the Romantic drama. Franz Grillparzer (1791-1872), Austria's greatest poet, began in the school of Müllner with a "fate drama," but soon won an independent place for himself; more successfully than any other dramatist of the century, he carried out that task which Kleist had first seriously faced, the reconciliation of the classicism of Goethe and Schiller with the Romantic and modern spirit of the 19th century. It is from this point of view that works like *Das goldene Vliess* (1820), *König Ottokars Glück und Ende* (1825), *Der Traum, ein Leben* (1834) and *Des Meeres und der Liebe Wellen* (1831) must be regarded. As far as the poetic drama was concerned, Grillparzer stood alone, for E.F.J. von Münch-

Bellinghausen (1806-1871), his most promising contemporary, once so popular under the pseudonym of Friedrich Halm, soon fell back into the trivial sentimentality of the later Romanticists. In other forms of dramatic literature Austria could point to many distinguished writers, notably the comedy-writer, E. von Bauernfeld (1802-1890), while a host of playwrights, chief of whom were F. Raimund (1790-1836) and J. Nestroy (1801-1862), cultivated the popular Viennese farce and fairy-play. Thus, in spite of Metternich's censorship of the drama, the Viennese theatre was, in the first half of the 19th century, in closer touch with literature than that of any other German centre.

The transitional character of the age is best illustrated by two eminent writers whom outward circumstances rather than any similarity of character and aim have classed together. These were K.L. Immermann, who has been already mentioned, and A. von Platen-Hallermund (1796-1835). Immermann's dramas were of little practical value to the theatre, but one at least, *Merlin* (1832), is a dramatic poem of great beauty. In his novels, however, *Die Epigonen* (1836) and *Münchhausen* (1838-1839), Immermann was the spokesman of his time. He looked backwards rather than forwards; he saw himself as the belated follower of a great literary age rather than as the pioneer of a new one. The bankruptcy of Romanticism and the poetically arid era of "Young Germany" left him little confidence in the future. Platen, on the other hand, went his own way; he, too, was the antagonist both of Romanticism and "Young Germany," and with Immermann himself he came into sharp conflict. But in his poetry he showed himself indifferent to the strife of contending literary schools. He began as an imitator of the German oriental poets—the only Romanticists with whom he had any personal sympathy—and with his matchless *Sonette aus Venedig* (1825) he stands out as a master in the art of verse-writing and as the least subjective of all German lyric poets. In the imitation of Romance metres he sought a refuge from the extravagances and excesses of the Romantic decadence.

Meanwhile the political side of the "Young German" movement, which the German Bund aimed at stamping out, gained rapidly in importance under the influence of the unsettled political conditions between the revolutions of 1830 and 1848. The early 'forties were in German literature marked by an extraordinary outburst of political poetry, which may be aptly compared with the national and patriotic lyric evoked by the year 1813. The principles which triumphed in France at the revolution of 1848 were, to a great extent, fought out by the German singers of 1841 and 1842. Begun by mediocre talents like N. Becker (1809-1845) and R.E. Prutz (1816-1872), the movement found a vigorous champion in Georg Herwegh (1817-1875), who in his turn succeeded in winning Ferdinand Freiligrath (1810-1876) for the revolutionary cause. Others joined in the cry for freedom—F. Dingelstedt (1814-1881), A.H. Hoffmann von Fallersleben (1798-1874), and a number of Austrians, who had even more reason for rebellion and discontent than the north Germans. But the best Austrian political poetry, the *Spaziergänge eines Wiener Poeten*, 1831, by "Anastasius Grün" (Graf A.A. von Auersperg, 1806-1876), belonged to a decade earlier. The political lyric culminated in and ended with the year 1848; the revolutionists of the 'forties were, if not appeased, at least silenced by the revolution which in their eyes had effected so little. If Freiligrath be excepted, the chief lyric poets of this epoch stood aside from the revolutionary movement; even E. Geibel (1815-1884), the representative poet of the succeeding age, was only temporarily interested in the political movement, and his best work is of a purely lyric character. M. von Strachwitz's (1822-1847) promising talent did not flourish in the political atmosphere; Annette von Droste-Hülshoff (1797-1848), and the Austrian, Nikolaus Lenau (1802-1850), both stand far removed from the world of politics; they are imbued with that pessimistic resignation which is, more or less, characteristic of all German literature between 1850 and 1870.

(*b*) *Mid-Century Literature*.—When once the revolution of 1848 was over, a spirit of tranquillity came over German letters; but it was due rather to the absence of confidence in the future than to any hopefulness or real content. The literature of the middle of the century was not wanting in achievement, but there was nothing buoyant or youthful about it; most significant of all, the generation between 1848 and 1880 was either oblivious or indifferent to the good work and to the new and germinating ideas which it produced. Hegel, who held the earlier half of the 19th century in his ban, was still all-powerful in the universities, but his power was on the wane in literature and public life. The so-called "Hegelian Left" had advanced so far as to have become incompatible with the original Hegelianism; the new social and economic theories did not fit into the scheme of Hegelian collectivism; the interest in natural science—fostered by the popular books of J. Moleschott (1822-1893), Karl Vogt (1817-1895) and Ludwig Büchner (1824-1899)—created a healthy antidote to the Hegelian metaphysics. In literature and art, on which Hegel, as we have seen, had exerted so blighting an influence, his place was taken by the chief exponent of philosophic pessimism, Arthur Schopenhauer (1788-1860). Schopenhauer's antagonism to Hegelianism was of old standing, for his chief work, *Die Welt als Wille und Vorstellung*, had appeared as far back as 1819; but the century was more than half over before the movement of ideas had, as it were, caught up with him, before pessimism became a dominant force in intellectual life.

The literature produced between 1850 and 1870 was preeminently one of prose fiction. The beginnings which the "Young German" school had made to a type of novel dealing with social problems—the best example is Gutzkow's *Ritter vom Geiste*—developed rapidly in this succeeding epoch. Friedrich Spielhagen (born 1829) followed immediately in Gutzkow's footsteps, and in a series of romances from *Problematische Naturen* (1860) to *Sturmflut* (1876), discussed in a militant spirit that recalls Laube and Gutzkow the social problems which agitated German life in these decades. Gustav Freytag (1816-1895), although an older man, freed himself more successfully from the "Young German" tradition; his romance of German commercialism, *Soll und Haben* (1855), is the masterpiece of mid-century fiction of this class. Less successful was Freytag's subsequent attempt to transfer his method to the *milieu* of German academic life in *Die verlorene Handschrift* (1864). As was perhaps only natural in an age of social and political interests, the historical novel occupies a subordinate place. The influence of Scott, which in the earlier period had been strong, produced only one writer, Wilhelm Häring ("Willibald Alexis," 1798-1871), who was more than a mere imitator of the Scottish master. In the series of six novels, from *Der Roland von Berlin* to *Dorothe*, which Alexis published between 1840 and 1856, he gave Germany, and more particularly Prussia, a historical fiction which might not unworthily be compared with the *Waverley Novels*. But Alexis had no successor, and the historical novel soon made way for a type of fiction in which the accurate reproduction of remote conditions was held of more account than poetic inspiration or artistic power. Such are the "antiquarian" novels of ancient Egyptian life by Georg Ebers (1837-1898), and those from primitive German history by Felix Dahn (born 1834). The vogue of historical fiction was also transferred to some extent, as in English literature, to novels of American life and adventure, of which the chief German cultivators were K.A. Postl, who wrote under the pseudonym of Charles Sealsfield (1793-1864) and Friedrich Gerstäcker (1816-1872).

Of greater importance was the fiction which owed its inspiration to the Romantic traditions that survived the "Young German" age. To this group belongs the novel of peasant and provincial life, of which Immermann had given an excellent example in *Der Oberhof*, a story included in the arabesque of *Münchhausen*. A Swiss pastor, Albrecht Bitzius, better known by his pseudonym "Jeremias Gotthelf" (1797-1854), was, however, the real founder of this class of romance; and his simple, unvarnished and naïvely didactic stories of the Swiss peasant were followed not long afterwards by the more famous *Schwarzwälder Dorfgeschichten* (1843-1854) of Berthold Auerbach (1812-1882). Auerbach is not by any means so naïve and realistic as Gotthelf, nor is his work free from tendencies and ideas which recall "Young German" rationalism rather than the unsophisticated life of the Black Forest; but the *Schwarzwälder Dorfgeschichten* exerted a decisive influence; they were the forerunners of a large body of peasant literature which described with affectionate sympathy and with a liberal admixture of dialect, south German village life. With this group of writers may also be associated the German Bohemian, A. Stifter (1805-1868), who has called up unforgettable pictures and impressions of the life and scenery of his home.

Meanwhile, the Low German peoples also benefited by the revival of an interest in dialect and peasant life; it is to the credit of Fritz Reuter (1810-1874) that he brought honour to the Plattdeutsch of the north, the dialects of which had played a fitful, but by no means negligible rôle in the earlier history of German letters. His Mecklenburg novels, especially *Ut de Franzosentid* (1860), *Ut mine Festungstid* (1863) and *Ut mine Stromtid* (1862-1864), are a faithful reflection of Mecklenburg life and temperament, and hold their place beside the best German fiction of the period. What Reuter did for Plattdeutsch prose, his contemporary, Klaus Groth (1819-1899), the author of *Quickborn* (1852), did for its verse. We owe, however, the best German prose fiction of these years to two writers, whose affinity with the older Romanticists was closer. The north German, Theodor Storm (1817-1888) is the author of a series of short stories of delicate, lyric inspiration, steeped in that elegiac Romanticism which harmonized so well with mid-century pessimism in Germany. Gottfried Keller (1819-1890), on the other hand, a native of Zürich, was a modern Romanticist of a robuster type; his magnificent autobiographical novel, *Der grüne Heinrich* (1854-1855), might be described as the last in the great line of Romantic fiction that had begun with *Wilhelm Meister*, and the short stories, *Die Leute von Seldwyla* (1856-1874) and *Züricher Novellen* (1878) are masterpieces of the first rank.

In the dramatic literature of these decades, at least as it was reflected in the repertories of the German theatres, there was little promise. French influence was, in general, predominant; French translations formed the mainstay of the theatre-directors, while successful German playwrights, such as R. Benedix (1811-1873) and Charlotte Birch-Pfeiffer (1800-1868), have little claim to consideration in a literary survey. Gustav Freytag's admirable comedy, *Die Journalisten* (1852), was one of the rare exceptions. But the German drama of this epoch is not to be judged solely by the theatres. At the middle of the century Germany could point to two writers who, each in his way, contributed very materially to the development of the modern

drama. These were Friedrich Hebbel (1813-1863) and Otto Ludwig (1813-1865). Both of these men, as a later generation discovered, were the pioneers of that dramatic literature which at the close of the century accepted the canons of realism and aimed at superseding outward effects by psychological conflicts and problems of social life. Hebbel, especially, must be regarded as the most original and revolutionary German dramatist of the 19th century. Unlike his contemporary Grillparzer, whose aim had been to reconcile the "classic" and the "romantic" drama with the help of Spanish models, Hebbel laid the foundations of a psychological and social drama, of which the most modern interpreter has been Henrik Ibsen. Hebbel's first tragedy, *Judith*, appeared in 1840, his masterpieces, *Herodes und Marianne*, *Agnes Bernauer*, *Gyges und sein Ring*, and the trilogy of *Die Nibelungen* between 1850 and 1862.

In this period of somewhat confused literary striving, there is, however, one body of writers who might be grouped together as a school, although the designation must be regarded rather as an outward accident of union than as implying conformity of aims. This is the group which Maximilian II. of Bavaria gathered round him in Munich between 1852 and 1860. A leading spirit of the group was Emanuel Geibel, who, as we have seen, set a model to the German lyric in this age; F. von Bodenstedt (1819-1892), the popular author of *Mirza Schaffy*; and J.V. von Scheffel (1826-1886), who, in his verse-romance, *Der Trompeter von Säckingen* (1854), broke a lance for a type of literature which had been cultivated somewhat earlier, but with no very conspicuous success, by men like O. von Redwitz (1823-1891) and G. Kinkel (1815-1882). The romance was, in fact, one of the favourite vehicles of poetic expression of the Munich school, its most successful exponents being J. Wolff (b. 1834) and R. Baumbach (1840-1905); while others, such as H. Lingg (1820-1905) and R. Hamerling (1830-1889) devoted themselves to the more ambitious epic. The general tone of the literary movement was pessimistic, the hopelessness of the spiritual outlook being most deeply engrained in the verse of H. Lorm (pseudonym for Heinrich Landesmann, 1821-1902) and H. Leuthold (1827-1879). On the whole, the most important member of the Munich group is Paul Heyse (b. 1830), who, as a writer of "Novellen" or short stories, may be classed with Storm and Keller. An essentially Latin genius, Heyse excels in stories of Italian life, where his lightness of touch and sense of form are shown to best advantage; but he has also written several long novels. Of these, *Kinder der Welt* (1873) and, in a lesser degree, *Im Paradiese* (1875), sum up the spirit and tendency of their time, just as, in earlier decades, *Die Ritter vom Geiste*, *Problematische Naturen* and *Soll und Haben* were characteristic of the periods which produced them.

(*c*) *German Literature after 1870.*—In the years immediately following the Franco-German War, the prevailing conditions were unfavourable to literary production in Germany, and the re-establishment of the empire left comparatively little trace on the national literature. All minds were for a time engrossed by the *Kulturkampf*, by the financial difficulties—the so-called *Gründertum*—due to unscrupulous speculation, and, finally, by the rapid rise of social democracy as a political force. The intellectual basis of the latter movement was laid by Ferdinand Lassalle (1825-1864) and Karl Marx (1818-1883), author of *Das Kapital* (vol. i, 1867). But even had such disturbing elements been wanting, the general tone of German intellectual life at that time was not buoyant enough to inspire a vigorous literary revival. The influence of Hegel was still strong, and the "historical" method, as enunciated in *Der alte und der neue Glaube* (1872) by the Hegelian D.F. Strauss, was generally accepted at the German universities. To many the compromise which H. Lotze (1817-1881) had attempted to establish between science and metaphysics, came as a relief from the Hegelian tradition, but in literature and art the dominant force was still, as before the war, the philosophy of Schopenhauer. In his *Philosophie des Unbewussten* (1869), E. von Hartmann (1842-1906) endeavoured to bring pessimism into harmony with idealism. In lyric poetry, the dull monotony was broken by the excitement of the war, and the singers of the revolution of 1848 were among the first to welcome the triumph and unification of Germany. At the same time, men of the older generation, like Herwegh, Freiligrath and Geibel could ill conceal a certain disappointment with the new régime; the united Germany of 1871 was not what they had dreamed of in their youth, when all hopes were set on the Frankfort parliament.

The novel continued to be what it was before 1870, the most vigorous form of German literature, but the novelists who were popular in the early 'seventies were all older men. Laube, Gutzkow and Auerbach were still writing; Fritz Reuter was a universal favourite; while among the writers of short stories, Storm, who, between 1877 and 1888, put the crown to his work with his *Chroniknovellen*, and Paul Heyse were the acknowledged masters. It was not until at least a decade later that the genius of Gottfried Keller was generally recognized. The historical novel seemed, in those days, beyond hope of revival. Gustav Freytag, it is true, had made the attempt in *Die Ahnen* (1872-1881), a number of independent historical romances linked together to form an ambitious prose epic; but there was more of the spirit of Ebers and Dahn in Freytag's work than of the spacious art of Scott, or of Scott's disciple, Willibald Alexis.

The drama of the ’seventies was in an even less hopeful condition than during the preceding period. The classical iambic tragedy was cultivated by the Munich school, by A. Wilbrandt (b. 1837), A. Lindner (1831-1888), H. Kruse (1815-1902), by the Austrian F. Nissel (1831-1893), and A. Fitger (b. 1840); but it was characteristic of the time that Halm was popular, while Hebbel and Grillparzer were neglected, it might even be said ignored. The most gifted German dramatist belonging exclusively to the decade between 1870 and 1880 was an Austrian, Ludwig Anzengruber (1839-1889), whose *Pfarrer von Kirchfeld* (1870) recalled the controversies of the *Kulturkampf*. This was Anzengruber’s first drama, and it was followed by a series of powerful plays dealing with the life of the Austrian peasant; Anzengruber was, indeed, one of the ablest exponents of that village life, which had attracted so many gifted writers since the days of Gotthelf and Auerbach. But the really popular dramatists of this epoch were either writers who, like Benedix in the older generation, cultivated the *bourgeoise* comedy—A. L’Arronge (b. 1838), G. von Moser (1825-1903), F. von Schönthan (b. 1849) and O. Blumenthal (b. 1852)—or playwrights, of whom P. Lindau (b. 1839) may be regarded as representative, who imitated French models. The only sign of progress in the dramatic history of this period was the marked improvement of the German stage, an improvement due, on the one hand, to the artistic reforms introduced by the duke of Meiningen in the Court theatre at Meiningen, and, on the other hand, to the ideals of a national theatre realized at Bayreuth by Richard Wagner (1813-1883). The greatest composer of the later 19th century is also one of Germany’s leading dramatists; and the first performance of the trilogy *Der Ring der Nibelungen* at Bayreuth in the summer of 1876 may be said to have inaugurated the latest epoch in the history of the German drama.

The last fifteen or twenty years of the 19th century were distinguished in Germany by a remarkable literary activity. Among the younger generation, which was growing up as citizens of the united German empire, a more hopeful and optimistic spirit prevailed. The influence of Schopenhauer was on the wane, and at the universities Hegelianism had lost its former hold. The sponsor of the new philosophic movement was Kant, the master of 18th-century “enlightenment,” and under the influence of the “neo-Kantian” movement, not merely German school philosophy, but theology also, was imbued with a healthier spirit. L. von Ranke (1795-1886) was still the dominant force in German historical science, and between 1881 and 1888 nine volumes appeared of his last great work, *Weltgeschichte*. Other historians of the period were H. von Sybel (1817-1895) and H. von Treitschke (1834-1896), the latter a vigorous and inspiring spokesman of the new political conditions; while J. Burckhardt (1818-1897), author of the masterly *Kultur der Renaissance in Italien* (1860) and the friend of Nietzsche, exerted an influence on German thought which was not confined to academic circles. Literary criticism perhaps benefited most of all by the dethronement of Hegel and the more objective attitude towards Schopenhauer; it seemed as if in this epoch the Germans first formed definite ideas—and ideas which were acceptable and accepted outside Germany—as to the rank and merits of their great poets. A marked change came over the nation’s attitude towards Goethe, a poet to whom, as we have seen, neither the era of Hegel nor that of Schopenhauer had been favourable; Schiller was regarded with less national prejudice, and—most important of all—amends were made by the new generation for the earlier neglect of Kleist, Grillparzer, Hebbel and Keller.

The thinker and poet who most completely embodies the spirit of this period—who dealt the Hegelian metaphysics its death-blow as far as its wider influence was concerned—was Friedrich Nietzsche (1844-1900). Nietzsche had begun as a disciple of Schopenhauer and a friend of Wagner, and he ultimately became the champion of an individualistic and optimistic philosophy which formed the sharpest possible contrast to mid-century pessimism. The individual, not the race, the *Herrenmensch*, not the slave, self-assertion, not self-denying renunciation—these are some of the ideas round which this new optimistic ethics turns. Nietzsche looked forward to the human race emerging from an effete culture, burdened and clogged by tradition, and re-establishing itself on a basis that is in harmony with man’s primitive instincts. Like Schopenhauer before him, Nietzsche was a stylist of the first rank, and his literary masterpiece, *Also sprach Zarathustra* (1883-1891), is to be regarded as the most important imaginative work of its epoch.

Nietzschean individualism was only one of many factors which contributed to the new literary development. The realistic movement, as it had manifested itself in France under Flaubert, the Goncourts, Zola and Maupassant, in Russia under Dostoievsky and Tolstoi, and in Norway under Ibsen and Björnson, was, for a time, the dominant force in Germany, and the younger generation of critics hailed it with undisguised satisfaction; most characteristic and significant of all, the centre of this revival was Berlin, which, since it had become the imperial capital, was rapidly establishing its claim to be also the literary metropolis. It was the best testimony to the vitality of the movement that it rarely descended to slavish imitation of the realistic masterpieces of other literatures; realism in Germany was, in fact, only an episode of the ’eighties, a stimulating influence rather than an accepted principle or dogma. And its

suggestive character is to be seen not merely in the writings of the young *Stürmer und Dränger* of this time, but also in those of the older generation who, in temperament, were naturally more inclined to the ideals of a past age.

Of the novelists of the latter class, A. Wilbrandt, who has already been mentioned as a dramatist, has shown, since about 1890, a remarkable power of adapting himself, if not to the style and artistic methods of the younger school, at least to the ideas by which it was agitated; F. Spielhagen's attitude towards the realistic movement has been invariably sympathetic, while a still older writer, Theodor Fontane (1819-1898), wrote between 1880 and 1898 a series of works in which the finer elements of French realism were grafted on the German novel. To the older school belong Wilhelm Jensen (b. 1837), and that fine humorist, Wilhelm Raabe (b. 1831), with whom may be associated as other humorists of this period, H. Seidel (1842-1906) and W. Busch (1832-1908). Some of the most interesting examples of recent German fiction come, however, from Austria and Switzerland. The two most eminent Austrian authors, Marie von Ebner-Eschenbach (b. 1830), and Ferdinand, von Saar (1833-1906), both excel as writers of Novellen or short stories—the latter especially being an exponent of that pessimism which is Austria's peculiar heritage from the previous generation of her poets. Austrians too, are Peter Rosegger (b. 1843), who has won popularity with his novels of peasant life, K.E. Franzos (1848-1904) and L. von Sacher-Masoch (1835-1895). German prose fiction is, in Switzerland, represented by two writers of the first rank: one of these, Gottfried Keller, has already been mentioned; the other, Konrad Ferdinand Meyer (1825-1898), turned to literature or, at least, made his reputation, comparatively late in life. Although, like Keller, a writer of virile, original verse, Meyer is best known as a novelist; he, too, was a master of the short story. His themes are drawn by preference from the epoch of the Renaissance, and his method is characterized by an objectivity of standpoint and a purity of style exceptional in German writers.

The realistic novels of the period were written by H. Conradi (1862-1890), Max Kretzer (b. 1854), M.G. Conrad (b. 1846), H. Heiberg (b. 1840), K. Bleibtreu (b. 1859), K. Alberti (pseudonym for Konrad Sittenfeld, b. 1862) and Hermann Sudermann (b. 1857). A want of stability was, however, as has been already indicated, characteristic of the realistic movement in Germany; the idealistic trend of the German mind proved itself ill-adapted to the uncompromising realism of the French school, and the German realists, whether in fiction or in drama, ultimately sought to escape from the logical consequences of their theories. Even Sudermann, whose *Frau Sorge* (1887), *Der Katzensteg* (1889), and the brilliant, if somewhat sensational romance, *Es war* (1894), are among the best novels of this period, has never been a consistent realist. It is consequently not surprising to find that, before long, German fiction returned to psychological and emotional problems, to the poetical or symbolical presentation of life, which was more in harmony with the German temperament than was the robuster realism of Flaubert or Zola. This trend is noticeable in the work of Gustav Frenssen (b. 1863), whose novel *Jörn Uhl* (1901) was extraordinarily popular; it is also to be seen in the studies of child life and educational problems which have proved so attractive to the younger writers of the present day, such as Hermann Hesse (b. 1877), Emil Strauss (b. 1866), Rudolf Huch (b. 1862) and Friedrich Huch (b. 1873). One might say, indeed, that at the beginning of the 20th century the traditional form of German fiction, the *Bildungsroman*, had come into its ancient rights again. Mention ought also to be made of J.J. David (1859-1907), E. von Keyserling (b. 1858), W. Hegeler (b. 1870), G. von Ompteda (b. 1863), J. Wassermann (b. 1873), Heinrich Mann (b. 1871) and Thomas Mann (b. 1875). *Buddenbrooks* (1902) by the last mentioned is one of the outstanding novels of the period. Some of the best fiction of the most recent period is the work of women, the most distinguished being Helene Böhlau (b. 1859), Gabriele Reuter (b. 1859), Clara Viebig (C. Cohn-Viebig, b. 1860) and Ricarda Huch (b. 1864). Whether the latest movement in German poetry and fiction, which, under the catchword *Heimatkunst*, has favoured the province rather than the city, the dialect in preference to the language of the educated classes, will prove a permanent gain, it is still too soon to say, but the movement is at least a protest against the decadent tendencies of naturalism.

At no period of German letters were literature and the theatre in closer touch than at the end of the 19th and the beginning of the 20th centuries; more than at any previous time has the theatre become the arena in which the literary battles of the day are fought out. The general improvement in the artistic, technical and economic conditions of the German stage have already been indicated; but it was not until 1889 that the effects of these improvements became apparent in dramatic literature. Before that date, it is true, Ernst von Wildenbruch (1845-1909) had attempted to revive the historical tragedy, but the purely literary qualities of his work were handicapped by a too effusive patriotism and a Schillerian pathos; nor did the talent of Richard Voss (b. 1851) prove strong enough to effect any lasting reform. In October 1889, however, Gerhart Hauptmann's play, *Vor Sonnenaufgang*, was produced on the then recently founded *Freie Bühne* in Berlin; and a month later, *Die Ehre* by Hermann Sudermann met with a more enthusiastic reception in Berlin than had fallen to the lot of any German play for more than a generation.

Hauptmann (b. 1862), the most original of contemporary German writers, stands, more or less, alone. His early plays, the most powerful of which is *Die Weber* (1892), were written under the influence either of an uncompromising realism, or of that modified form of realism introduced from Scandinavia; but in *Hanneles Himmelfahrt* (1893) he combined realism with the poetic mysticism of a child's dream, in *Florian Geyer* (1895) he adapted the methods of realism to an historical subject, and in the year 1896 he, to all appearance, abandoned realism to write an allegorical dramatic poem, *Die versunkene Glocke*. Hauptmann's subsequent work has oscillated between the extremes marked out by these works—from the frank naturalism of *Fuhrmann Henschel* (1898) and *Rose Berndt* (1903), to the fantastic mysticism of *Der arme Heinrich* (1902) and *Und Pippa tanzt!* (1906).

The dramatic talent of Hermann Sudermann has developed on more even lines; the success of *Die Ehre* was due in the first instance to the ability which Sudermann had shown in adapting the ideas of his time and the new methods of dramatic presentation to the traditional German *bürgerliches Drama*. This is the characteristic of the majority of the many plays which followed of which *Heimat* (1893), *Das Glück im Winkel* (1896) and *Es lebe das Leben!* (1902) may be mentioned as typical. With less success Sudermann attempted in *Johannes* (1898) a tragedy on lines suggested by Hebbel. A keen observer, a writer of brilliant and suggestive ideas, Sudermann is, above all, the practical playwright; but it is unfortunate that the theatrical element in his work too often overshadows its literary qualities.

Since 1889, the drama has occupied the foreground of interest in Germany. The permanent repertory of the German theatre has not, it is true, been much enriched, but it is at least to the credit of contemporary German playwrights that they are unwilling to rest content with their successes and are constantly experimenting with new forms. Besides Hauptmann and Sudermann, the most talented dramatists of the day are Max Halbe (b. 1865), O.E. Hartleben (1864-1905), G. Hirschfeld (b. 1873), E. Rosmer (pseudonym for Elsa Bernstein, b. 1866), Ludwig Fulda (b. 1862), Max Dreyer (b. 1862), Otto Ernst (pseudonym for O.E. Schmidt, b. 1862) and Frank Wedekind (b. 1864). In Austria, notwithstanding the preponderant influence of Berlin, the drama has retained its national characteristics, and writers like Arthur Schnitzler (b. 1862), Hermann Bahr (b. 1863), Hugo von Hofmannsthal (b. 1874) and R. Beer-Hofmann (b. 1866) have introduced symbolistic elements and peculiarly Austrian problems, which are foreign to the theatre of north Germany.

The German lyric of recent years shows a remarkable variety of new tones and pregnant poetic ideas; it has, as is natural, been more influenced by the optimism of Nietzsche—himself a lyric poet of considerable gifts—than has either novel or drama. Detlev von Liliencron (1844-1909) was one of the first to break with the traditions of the lyric as handed down from the Romantic epoch and cultivated with such facility by the Munich poets. An anthology of specifically modern lyrics, *Moderne Dichtercharaktere* (1885) by W. Arent (b. 1864), may be regarded as the manifesto of the movement in lyric poetry corresponding to the period of realism in fiction and the drama. Representative poets of this movement are Richard Dehmel (b. 1863), K. Henckell (b. 1864), J.H. Mackay (b. 1864 at Greenock), G. Falke (b. 1853), F. Avenarius (b. 1856), F. Evers (b. 1871), F. Dörmann (b. 1870) and K. Busse (b. 1872). A later development of the lyric—a return to mysticism and symbolism—is to be seen in the poetry of Hofmannsthal, already mentioned as a dramatist, and especially in Stefan George (b. 1868). Epic poetry, although little in harmony with the spirit of a realistic age, has not been altogether neglected. Heinrich Hart (1855-1906), one of the leading critics of the most advanced school, is also the author of an ambitious *Lied der Menschheit* (vols. 1-3, 1888-1896); more conservative, on the other hand, is *Robespierre* (1894), an epic in the style of Hamerling by an Austrian, Marie delle Grazie (b. 1864). Attention may also be drawn to the popularity which, for a few years, the so-called *Überbrettl* or cabaret enjoyed, a popularity which has left its mark on the latest developments of the lyric. Associated with this movement are O.J. Bierbaum (1865-1910), whose lyrics, collected in *Der Irrgarten der Liebe* (1901), have been extraordinarily popular, E. von Wolzogen (b. 1855) and the dramatist F. Wedekind, who has been already mentioned.

Whether or not the work that has been produced in such rich measure since the year 1889—or however much of it—is to be regarded as a permanent addition to the storehouse of German national literature, there can be no question of the serious artistic earnestness of the writers; the conditions for the production of literature in the German empire in the early years of the 20th century were eminently healthy, and herein lies the best promise for the future.

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(J. G. R.)

GERMAN REED ENTERTAINMENT. The dramatic and musical entertainment which for many years was known in London by the title of "German Reed" was a form of theatrical enterprise deserving of commemoration in connexion with those who made it successful. Mr Thomas German Reed (born in Bristol in 1817, died 1888) married in 1844 Miss Priscilla Horton (1818-1895), and in 1855 they started their entertainment at the "Gallery of Illustration," in Waterloo Place, London. From 1860 to 1877 they were assisted by John Orlando Parry (1810-1879), an accomplished pianoforte player, mimic, parodist and humorous singer; and the latter created a new type of musical and dramatic monologue which became very popular. His tradition was carried on after 1870 by Mr Corney Grain (1844-1895), who, as a clever, refined, and yet highly humorous society entertainer (originally a barrister), was one of the best-known figures of his day. After the retirement of the elder German Reeds, their son, Alfred German Reed (1846-1895), himself a capital actor, carried on the business in partnership with Corney Grain. The "German Reed Entertainment"—which was always patronized by a large class of people, many of whom objected on principle to going or taking their children to a regular theatre or a music-hall—retained its vogue for forty years at Waterloo Place and at the St George's Hall, Regent Street. But the death of Mr Corney Grain almost simultaneously with Mr Alfred German Reed, in 1895, together with the changed public attitude towards the regular theatre, ended its career.

GERMAN SILVER or Nickel Silver, an alloy of copper, nickel and zinc, prepared either by melting the copper and nickel together in a crucible, and adding piece by piece the previously heated zinc, or by heating the finely divided metals under a layer of charcoal. To destroy its crystalline structure and so render it fit for working, it is heated to dull redness, and then allowed to cool. German silver is harder than silver; it resembles that metal in colour, but is of a greyer tinge. Exposed to the air it tarnishes slightly yellow, and with vinegar affords a crust of verdigris. At a bright red heat it melts, losing its zinc by oxidation unless protected from the atmosphere. At a heat above dull redness it becomes exceedingly brittle. German silver in various modifications of composition is much used in the arts. Alloys, of which about 50% is copper and the residue zinc and nickel in about equal proportions take a fine polish, and are used as imitation silver for knives and forks. With a somewhat higher proportion of copper an alloy is formed suitable for rolling and for wire. In Chinese *white silver* or *packfong* (paktong) the amount of copper is smaller, about 40%, with about 32% of nickel, 25 of zinc, and 2 or 3 of iron. German silver for casting contains 2 or 3% of lead, which like iron increases the

whiteness of the alloy. German silver, having a high specific resistance and a low temperature coefficient, has been used for electrical resistance coils, and these qualities are possessed in a still greater degree in *manganin*, which contains manganese in place of zinc, its composition being 84% of copper, 12 of manganese and 4 of nickel. The addition of a trace of tungsten to German silver, as in *platinoid*, also largely increases the resistance.

GERMAN SOUTH-WEST AFRICA. This German possession is bounded W. by the Atlantic, N. by Angola, S. by the Cape province, E. by Bechuanaland and Rhodesia, and is the only German dependency in Africa suited to white colonization. It has an area of about 322,450 sq. m., and a population of Bantu Negroes and Hottentots estimated in 1903 at 200,000.[1] The European inhabitants, in addition to the military, numbered 7110 in 1907, of whom the majority were German.

Area and Boundaries.—The boundary separating the German protectorate from the Portuguese possessions of Angola is the lower Kunene, from its mouth in 17° 18′ S., 11° 40′ E. to the limit of navigability from the sea, thence in a direct line, corresponding roughly to the lat. of 17° 20′ S., to the river Okavango, which it follows eastwards until the stream turns abruptly south (towards Lake Ngami). From this point a strip of German territory 300 m. long and about 50 m. broad, projects eastward until it reaches the Zambezi a little above the Victoria Falls. On the south this narrow strip of land (known as the Caprivi enclave) is separated from southern Rhodesia by the Kwando or Chobe river. On the east the frontier between British and German territory is in its northern half the 21st degree of E. longitude, in its southern half the 20th degree. This frontier is drawn through desert country. The southern frontier is the Orange river from its mouth to the 20° E. The coast-line between the Kunene and Orange rivers is not wholly German. Just north of the tropic of Capricorn is the British enclave of Walfish Bay (*q.v.*). The northern part of the protectorate is known as Ovampoland, the central portion as Damara (or Herero) land; the southern regions as Great Namaqualand. These names are derived from those of the dominant native races inhabiting the country.

Physical Features.—The coast-line is generally low and little broken by bays or promontories. In its entire length of about 800 m. it has no good natural harbour, and its bays—Angra Pequena, otherwise Lüderitz Bay, Sierra Bay, Sandwich Harbour—are in danger of being filled with sand by the strong, cold, northerly coast current. Swakopmund is an artificial harbour at the mouth of the river Swakop. The small islands which stud the coast north and south of Angra Pequena belong to Great Britain. The coast-line is bordered by a belt of sand-dunes and desert, which, about 35 m. wide in the south, narrows towards the north. This coast belt is flanked by a mountain range, which attains its highest elevation in Mount Omatako (8972 ft.), in about 21° 15′ S., 16° 40′ E. N. E. of Omatako is the Omboroko range, otherwise known as the Waterberg. South of Omboroko, occupying the centre of the country, the range attains its highest average altitude. The following massifs with their highest points may be distinguished: Gans (7664 ft.), Nu-uibeb (7480 ft.), Onyati (7201 ft.), Awas (6988 ft.), Komas (5331 ft.) and Ganab (4002 ft.). In the S.E. are the Karas mountains, which attain an elevation of 6570 ft. The mountains for the main part form the escarpment of the great Kalahari plateau, which, gently rising from the interior towards the west, slopes again towards the south and north from the point of its highest elevation. The Kalahari plateau changes the undulating character it has in the west to a perfect plain in the far east, where the watered and habitable country merges into the sterile Kalahari desert. In the northern half of the country the central plateau contains much rich grass-land, while in the north-eastern region the Omaheke desert has all the characteristics of the Kalahari.

There are no rivers of importance wholly within German South-West Africa. The Kunene (*q.v.*) has but a small portion of the southern bank in the colony, and similarly only part of the northern bank of the Orange river (*q.v.*) is in German territory. Several streams run south into the Orange; of those the chief is the Great Fish river, which has a course of nearly 500 m. Both the Kunene and the Orange carry water all the year round, but are not navigable. Neither is the Great Fish river, which, however, is rarely dry. The Okavango, which comes from the north and runs towards Ngami (*q.v.*), is perennial, but like the Kunene and Orange, belongs only partly to the hydrographic system of the country. From the inner slopes of the coast chain many streams go N.E. to join the Okavango. They cross the Omaheke waste and are usually dry. Ovampoland has a hydrographic system connected with the Kunene, and, in seasons of great flood, with that of Ngami. Before the Kunene breaks through the outer edge of the plateau, it sends divergent channels south-east to a large marsh or lake called Etosha, which is cut by 17° E. and 19° S. Of these channels the Kwamatuo or Okipoko, which is perennial, enters Etosha at its N.W. corner. The lake when full extends about 80 m. W. to E. and 50 m. N. to S. From its S.E. corner issues the Omuramba, which divides into two branches, known respectively as the Omaheke and the

Ovampo. These streams have an easterly direction, their beds, often dry, joining the Okavango. The other rivers of the protectorate have as a rule plenty of water in their upper courses in the rainy season, though some river beds are dry for years together. After a heavy thunderstorm such a river bed will be suddenly filled with a turbid current half a mile wide. The water is, however, before long absorbed by the thirsty land. Only in exceptionally rainy years do the streams which cross the sand belt carry water to the ocean. But in the sand which fills the river beds water may be obtained by digging. Of rivers running direct to the Atlantic the Little Fish river enters the sea at Angra Pequena and the Kuisip in Walfish Bay. The Swakop rises in the hills near the Waterberg, and north of it is the Omaruru, which carries water for the greater part of the year. Hot springs are numerous, and it is remarkable that those of Windhoek flow more copiously during the dry than the rainy season. There are also many cold springs, and wells which contain water all the year.

Geology.—Gneiss and schist, with intrusive granites and porphyries, overlain to a great extent by sand and lateritic deposits, occupy the coast belt, coast mountains and the plateau of Damaraland. In the Huib and Han-ami plateaus of Great Namaqualand the crystalline rocks are overlain by sandstones, slates, quartzites and jasper rocks, and these in turn by dolomites. They are probably equivalent to the Transvaal and Pretoria series (see TRANSVAAL: *Geology*). The next oldest rocks are of recent geological date. The Kalahari Kalk, which extends over large areas to the south-east of Ovampoland, may be of Miocene age, but it has not yielded fossils. Extensive tracts of alluvium occur in the basin of the Ovampo, while the dunes and sand-tracts of the Kalahari occupy the eastern regions.

Climate.—On the coast the mean temperature is low, and there is little rainfall. Moisture is supplied by dense fogs, which rise almost daily. South-west winds prevail. Inland the climate is temperate rather than tropical, with bracing, clear atmosphere. There are considerable differences of temperature between day and night, and two well-marked seasons, one cold and dry from May to September, the other hot and rainy from October to April. In winter ice frequently forms during the night on open water on the plateau, but it never remains all day. The yearly rainfall is about 20 in. in the Damara Hills; there is more rain in the north than in the south, and in the east than in the west. In the greater part of the colony the climate is favourable for European settlement.

Flora and Fauna.—The vegetation corresponds exactly with the climate. In the dry littoral region are plants able to exist with the minimum of moisture they derive from the daily fog —*Amarantaceae*, *Sarcocaula*, *Aloe dichotoma*, *Aristida subacaulis* and the wonderful *Welwitschia*. Farther inland are plants which spring up and disappear with the rain, and others whose roots reach permanent water. The former are chiefly grasses, the latter exist almost solely in or near river-beds. Amongst the fine trees often seen here, the ana tree (*Acacia albida*) is the most noteworthy, its seeds being favourite fodder for all domestic animals. *Acacia giraffae*, *Ac. horrida*, *Adansonia sterculia*, near the Kunene the *Hyphaene ventricosa*, deserve special notice. The vegetation in the mountain valleys is luxuriant, and towards the north is of a tropical character. The palm zone extends a considerable distance south of the Kunene, and here vegetation spreads over the sand-dunes of the coast plain, which are covered with grasses.

Large game, formerly abundant, especially pachyderms, is scarce. Of antelopes the following species are plentiful in parts: springbok, steenbok, kudu, rietbok, pallah; of monkeys, the *Cynocephalus porcarius* is frequent. Various kinds of hyenas and jackals with fine fur (*Canis mesomelas*), also *Felis caracal*, abound. The spring-hare (*Pedestea caffer*) and rock-rabbit (*Hyrax capensis*) may often be observed. Of birds there are 728 species. Crocodiles, turtles and snakes are numerous.

Inhabitants.—Among the natives of German South-West Africa three classes may be distinguished. In the first class are the Namaqua (Hottentots) and Bushmen. The Namaqua probably came from the south, while the Bushmen may be looked upon as an indigenous race. The Hottentots, the purest existing types of that race, are divided into numerous tribes, independent of one another, such as the Witbois, Swartzbois, Bondelzwarts. The Bushmen are found scattered over the eastern parts of the country (see HOTTENTOTS and BUSHMEN). The second class consists of the mountain Damara (Hau-Khoin), a race of doubtful affinities, probably of Bantu-Negro origin, but speaking the Hottentot language. The third class belongs to the Bantu-Negro stock, and came from the north-east, expelling and enslaving the mountain Damara, and settling in various parts of the country under different names. The most prominent are the Herero, thorough nomads and cattle-breeders; while the Ovampo (Ovambo or Ambo), in the northern part of the protectorate, are agriculturists. The Herero (*q.v.*) are also known by the Hottentot name Damara, and by this name their country is generally called. The Bastaards, who live in Namaqualand, are a small tribe originating from a mingling of Cape Boers with Hottentots. They are Christians, and able to read and write. The other natives are spirit-worshippers, save for the comparatively few converts of the Protestant missions established in the country. Of white races represented the chief are Germans and Boers. In the S.E. Boer settlers form the bulk of the white population. There are also numbers of British colonists in

this region—emigrants from the Cape. The immigration of Germans is encouraged by subsidies and in other ways.

Towns.—The chief port is Swakopmund, built on the northern bank of the Swakop river (the southern bank belonging to the British territory of Walfish Bay). The harbour is partially protected by a breakwater. There are also settlements at Lüderitz Bay (white pop. 1909, over 1000) and at Sandwich Harbour. Swakopmund is connected by a narrow gauge railway with Windhoek, the administrative capital of the colony, situated in a hilly district 180 m. due east of the port, but 237 m. by the railway. Karibib is the only place of consequence on the line. Otyimbingue is a government station 70 m. W.N.W. of Windhoek, and Tsumeb a mining centre 240 m. N.N.E. of the same place. Olukonda is a government post in Ovampoland. In the S.E. corner of the colony, 30 m. N. of the Orange river, is the town of Warmbad. Keetmanshoop, 100 m. N. of Warmbad and 180 m. E. of Lüderitz Bay, is the centre of a small mining industry. Gibeon is a government station and missionary settlement about midway between Keetmanshoop and Windhoek. Besides these places there are numbers of small native towns at which live a few white traders and missionaries. The missionaries have given Biblical names to several of their stations, such as Bethany and Beersheba in Namaqualand, and Rehoboth in Damaraland. In the Caprivi enclave are a German residency and the site of the town of Linyante, once the capital of the Makololo dynasty of Barotseland (see BAROTSE).

Industries.—Agriculture is followed by the natives in the northern districts, but the chief industry is stock-raising. The scarcity of water in the southern parts is not favourable for agricultural pursuits, while the good grazing lands offer splendid pasturage for cattle, which the Herero raise in numbers amounting to many hundred thousands. Sheep and goats thrive well. Horses have been imported from the Cape. Unfortunately the climate does not suit them everywhere, and they are subject to a virulent distemper. Cattle and sheep also suffer from the diseases which are common in the Cape Colony. Camels have been imported, and are doing well. Wheat, maize and sorghum are the chief crops raised, though not enough is grown to meet even local requirements. Near the coast the natives collect the kernels of the nara, a wild-growing pumpkin which, in the words of an early traveller, C.J. Andersson, “are eaten by oxen, mice, men, ostriches and lions.” About half the European settlers are engaged in agriculture. They raise maize, wheat, tobacco, fruit and vegetables. Cotton cultivation and viticulture are carried on in some districts.

Minerals, especially copper, are plentiful in the country. The chief copper deposits are at Tsumeb, which is 4230 ft. above the sea, in the Otavi district. Diamonds are found on and near the surface of the soil in the Lüderitz Bay district, and diamonds have also been found in the neighbourhood of Gibeon. A little pottery is made, and the Hottentot women are clever in making fur cloths. In the north the Ovampo do a little smith-work and grass-plaiting. The external trade of the country was of slow growth. The exports, previous to the opening up of the Otavi mines, consisted chiefly of live stock—sent mainly to Cape Colony—guano, ivory, horns, hides and ostrich feathers. The chief imports are food stuffs, textiles and metals, and hardware. In 1903 the value of the exports was £168,560, that of the imports £388,210. The war which followed (see below, *History*) led to a great shrinking of exports, rendering the figures for the period 1904-1907 useless for purposes of comparison. About 85% of the imports are from Germany.

Communications.—The economic development of the country is largely dependent on transport facilities. The railway from Swakopmund to Windhoek, mentioned above, was begun in 1897, and was opened for traffic in July 1902. It cost nearly £700,000 to build. Another narrow gauge railway, to serve the Otavi copper mines, was begun in 1904 and completed in 1908. It starts from Swakopmund and is 400 m. long, the terminus being at Grootfontein, 40 m. S.E. of Tsumeb. The highest point on this line is 5213 ft. above the sea. In 1906-1908 a railway, 180 m. long, was built from Lüderitz Bay to Keetmanshoop. This line is of the standard South African gauge (3 ft. 6 in.), that gauge being adopted in view of the eventual linking up of the line with the British railway systems at Kimberley. A branch from Seeheim on the Keetmanshoop line runs S.E. to Kalkfontein.

Besides railways, roads have been made between the chief centres of population. Along these, in the desert districts, wells have been dug. Across the Awas Mountains, separating Windhoek from the central plateau, a wide road has been cut. In 1903 the colony was placed in telegraphic communication with Europe and Cape Colony by the laying of submarine cables having their terminus at Swakopmund. There is a fairly complete inland telegraphic service.

There is regular steamship communication between Hamburg and Swakopmund, Walfish Bay and Lüderitz Bay. Regular communication is also maintained between Cape Town and the ports of the colony.

Administration.—At the head of the administration is an imperial governor, responsible to the colonial office in Berlin, who is assisted by a council consisting of chiefs of departments. The country is divided into various administrative districts. In each of these there is a *Bezirksamtmann*, with his staff of officials and police force. In each district is a law court, to

whose jurisdiction not alone the whites, but also the Bastaards are subject. As in all German colonies, there is a court of appeal at the residence of the governor. The government maintains schools at the chief towns, but education is principally in the hands of missionaries. The armed force consists of regular troops from Germany and a militia formed of Bastaards. The local revenue for some years before 1903 was about £130,000 per annum, the expenditure about £400,000, the difference between local receipts and expenditure being made good by imperial subsidies. In 1908 local revenue had risen to £250,000, but the imperial authorities incurred an expenditure of over £2,000,000, largely for military purposes. On articles of export, such as feathers and hides, 5% *ad valorem* duty has to be paid; on cattle and horses an export tax per head. There is a 10% *ad valorem* duty on all imports, no difference being made between German and foreign goods. The sale of spirituous liquors is subject to a licence.

History.—The coast of south-west Africa was discovered by Bartholomew Diaz in 1487, whilst endeavouring to find his way to the Indies. He anchored in a bay which by reason of its smallness he named Angra Pequena. Portugal, however, took no steps to acquire possession of this inhospitable region, which remained almost unvisited by Europeans until the early years of the 19th century. At this time the country was devastated by a Hottentot chief known as Afrikander, who had fled thither with a band of outlaws after murdering his master, a Boer farmer by whom he had been ill-treated, in 1796. In 1805 some missionaries (of German nationality) went into Namaqualand in the service of the London Missionary Society, which society subsequently transferred its missions in this region to the Rhenish mission, which had had agents in the country since about 1840. The chief station of the missionaries was at a Hottentot settlement renamed Bethany (1820), a place 125 m. E. by Angra Pequena. The missionaries had the satisfaction of stopping Afrikander's career of bloodshed. He became a convert, a great friend of the mission, and took the name of Christian. The proximity of Great Namaqualand to Cape Colony led to visits from British and Dutch farmers and hunters, a few of whom settled in the country, which thus became in some sense a dependency of the Cape.

In 1867 the islands along the coast north and south of Angra Pequena, on which were valuable guano deposits, were annexed to Great Britain. At this time a small trade between the natives and the outside world was developed at Angra Pequena, the merchants engaged in it being British and German. The political influence of the Cape spread meantime northward to the land of the Herero (Damara). The Herero had been subjugated by Jonker Afrikander, a son of Christian Afrikander, who followed the early footsteps of his sire and had renounced Christianity, but in 1865 they had recovered their independence. The Rhenish missionaries appealed (1868) to the British government for protection, and asked for the annexation of the country. This request, although supported by the Prussian government, was refused. In 1876, however, a special commissioner (W. Coates Palgrave) was sent by the Cape government "to the tribes north of the Orange river." The commissioner concluded treaties with the Namaqua and Damara which fixed the limits of the territories of the two races and placed the whole country now forming German South-West Africa within the sphere of British influence. In the central part of Damaraland an area of some 35,000 sq. m. was marked out as a British reservation. The instrument by which this arrangement was made was known as the treaty of Okahandya. Neither it nor the treaty relating to Great Namaqualand was ratified by the British government, but at the request of Sir Bartle Frere, then high commissioner for South Africa, Walfish Bay (the best harbour along the coast) was in 1878 annexed to Great Britain.

In 1880 fighting between the Namaqua, who were led by Jan Afrikander, son of Jonker and grandson of Christian Afrikander, and the Damara broke out afresh, and was not ended until the establishment of European rule. In 1883 F.A.E. Lüderitz (1834-1886), a Bremen merchant, with the approval of Prince Bismarck, established a trading station at Angra Pequena. This step led to the annexation of the whole country to Germany (see Africa, § 5) with the exception of Walfish Bay and the islands actually British territory. On the establishment of German rule Jonker Afrikander's old headquarters were made the seat of administration and renamed Windhoek. The Hottentots, under a chieftain named Hendrik Witboi, offered a determined opposition to the Germans, but after a protracted war peace was concluded in 1894 and Hendrik became the ally of the Germans. Thereafter, notwithstanding various local risings, the country enjoyed a measure of prosperity, although, largely owing to economic conditions, its development was very slow.

German rule established.

In October 1903 the Bondelzwarts, who occupy the district immediately north of the Orange river, rose in revolt. This act was the beginning of a struggle between the Germans and the natives which lasted over four years, and cost Germany the lives of some 5000 soldiers and settlers, and entailed an expenditure of £15,000,000. Abuses committed by white traders, the brutal methods of certain officials and the occupation of tribal lands were among the causes of the war, but impatience of white rule was believed to be the chief reason for the revolt of the Herero, the most formidable of the opponents of the Germans. The Herero had accepted the German protectorate by treaty—

Herero war.

without fully comprehending that to which they had agreed. To crush the Bondelzwarts, an object attained by January 1904, the governor, Colonel Theodor Leutwein, had denuded Damaraland of troops, and advantage was taken of this fact by the Herero to begin a long-planned and well-prepared revolt. On the 12th of January 1904 most of the German farmers in Damaraland were attacked, and settlers and their families murdered and the farms devastated. Reinforcements were sent from Germany, and in June General von Trotha arrived and took command of the troops. On the 11th of August von Trotha attacked the Herero in their stronghold, the Waterberg, about 200 m. N. of Windhoek, and inflicted upon them a severe defeat. The main body of the enemy escaped, however, from the encircling columns of the Germans, and thereafter the Herero, who were under the leadership of Samuel Maherero, maintained a guerrilla warfare, rendering the whole countryside unsafe. The Germans found pursuit almost hopeless, being crippled by the lack of water and the absence of means of transport. To add to their troubles a Herero bastard named Morenga, with a following of Hottentots, had, in July, recommenced hostilities in the south. On the 2nd of October 1904 von Trotha, exasperated at his want of success in crushing the enemy, issued a proclamation in which he said: “Within the German frontier every Herero with or without a rifle, with or without cattle, will be shot. I will not take over any more women and children. But I will either drive them back to your people or have them fired on.” In a later order von Trotha instructed his soldiers not to fire into, but to fire over the heads of the women and children, and Prince Bülow ordered the general to repeal the whole proclamation. Whenever they had the chance, however, the Germans hunted down the Herero, and thousands perished in the Omaheke desert, across which numbers succeeded in passing to British territory near Ngami.

On the day following the issue of von Trotha’s proclamation to the Herero, *i.e.* on the 3rd of October 1904, Hendrik Witboi sent a formal declaration of war to the Germans. Hendrik had helped to suppress the Bondelzwarts rising, and had received a German decoration for his services, and his hostility is said to have been kindled by the supersession of Colonel Leutwein, for whom he entertained a great admiration. The Witbois were joined by other Hottentot tribes, and their first act was to murder some sixty German settlers in the Gibeon district. Both British and Boer farmers were spared—the Hottentots in this matter following the example of the Herero. In November, considerable reinforcements having come from Germany, the Witbois were attacked, and Hendrik’s headquarters, Reitmont, captured. Another defeat was inflicted on Hendrik in January 1905, but, lacking ammunition and water, the Germans could not follow up their victory. As in Damaraland, the warfare in Namaqualand now assumed a guerrilla character, and the Germans found it almost impossible to meet their elusive enemy, while small detachments were often surprised and sometimes annihilated. In May 1905 von Trotha tried the effect on the Hottentots of another of his proclamations. He invited them to surrender, adding that in the contrary event all rebels would be exterminated. A price was at the same time put on the heads of Hendrik Witboi and other chiefs. This proclamation was unheeded by the Hottentots, who were in fact continuing the war with rifles and ammunition seized from the Germans, and replenishing their stock with cattle taken from the same source. In the north, however, Samuel Maherero had fled to British territory, and the resistance of the Herero was beginning to collapse. Concentration camps were established in which some thousands of Herero women and children were cared for. Meanwhile, the administration of von Trotha, who had assumed the governorship as well as the command of the troops, was severely criticized by the civilian population, and the non-success of the operations against the Hottentots provoked strong military criticism. In August 1905 Colonel (afterwards General) Leutwein, who had returned to Germany, formally resigned the governorship of the protectorate, and Herr von Lindequist, late German consul-general at Cape Town, was nominated as his successor. Von Trotha, who had publicly criticized Prince Bülow’s order to repeal the Herero proclamation, was superseded. He had in the summer of 1905 instituted a series of “drives” against the Witbois, with no particular results. Hendrik always evaded the columns and frequently attacked them in the rear.

In November 1905 von Lindequist arrived at Windhoek. The new governor issued a general amnesty to the Herero, and set aside two large reserves for those who surrendered. His conciliatory policy was in the end successful, and the Ovampo, who threatened to give trouble, were kept in hand. The task of pacifying Damaraland was continued throughout 1906, and by the close of that year about 16,000 Herero had been established in the reserves. Some 3000 had sought refuge in British territory, while the number who had perished may be estimated at between 20,000 and 30,000.

The Hottentots

In Namaqualand von Lindequist found an enemy still unbroken. On the 3rd of November, however, Hendrik Witboi died, aged seventy-five, and his son and successor Samuel Isaac Witboi shortly afterwards surrendered, and the hostility of the tribe ceased. Morenga now became the chief of the rebel Hottentots, and “drives” against him were organized. Early in May 1906 an encounter between Morenga and a German column was fought close to the British frontier of the Bechuanaland

subdued. protectorate. Morenga fled, was pursued across the frontier, and wounded, but escaped. On the 16th of May he was found hiding by British patrols and interned. Other Hottentot chiefs continued the conflict, greatly aided by the immense difficulty the Germans had in transporting supplies; to remedy which defect the building of a railway from Lüderitz Bay to Kubub was begun early in 1906. A camel transport corps was also organized, and Boer auxiliaries engaged. Throughout the later half of 1906 the Hottentots maintained the struggle, the Karas mountains forming a stronghold from which their dislodgment was extremely difficult. Many of their leaders and numbers of the tribesmen had a considerable strain of white (chiefly Dutch) blood and were fairly educated men, with a knowledge not only of native, but European ways; facts which helped to make them formidable opponents. Gradually the resistance of the Hottentots was overcome, and in December 1906 the Bondelzwarts again surrendered. Other tribes continued the fight for months longer, but by March 1907 it was found possible to reduce the troops in the protectorate to about 5000 men. At the height of the campaign the Germans had 19,000 men in the field.

In August 1907 renewed alarm was created by the escape of Morenga from British territory. The Cape government, regarding the chief as a political refugee, had refused to extradite him and he had been assigned a residence near Upington. This place he left early in August and, eluding the frontier guards, re-entered German territory. In September, however, he was again on the British side of the border. Meantime a force of the Cape Mounted Police under Major F.A.H. Eliott had been organized to effect his arrest. Summoned to surrender, Morenga fled into the Kalahari Desert. Eliott's force of sixty men pursued him through a waterless country, covering 80 m. in 24 hours. When overtaken (September 21st), Morenga, with ten followers, was holding a kopje and fired on the advancing troops. After a sharp engagement the chief and five of his men were killed, the British casualties being one killed and one wounded. The death of Morenga removed a serious obstacle to the complete pacification of the protectorate. Military operations continued, however, during 1908. Herr von Lindequist, being recalled to Berlin to become under-secretary in the colonial office, was succeeded as governor (May 1907) by Herr von Schuckmann. In 1908 steps were taken to establish German authority in the Caprivi enclave, which up to that time had been neglected by the colonial authorities.

The discovery of diamonds in the Lüderitz Bay district in July 1908 caused a rush of treasure-seekers. The diamonds were found mostly on the surface in a sandy soil and were of small size. The stones resemble Brazilian diamonds. By the end of the year the total yield was over 39,000 carats. One of the difficulties encountered in developing the field was the great scarcity of fresh water. During 1909 various companies were formed to exploit the diamondiferous area. The first considerable packet of diamonds from the colony reached Germany in April 1909. The output for the year was valued at over £1,000,000.

Discovery of diamonds.

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(F. R. C.)

1 As the result of wars with the natives, the population greatly decreased. The number of adult (native) males in the colony at the beginning of 1908 was officially estimated at 19,900, a figure indicating a total population of little more than 100,000.

GERMANTOWN, a residential district and former suburb, now the Twenty-second Ward, of Philadelphia, Pennsylvania, U.S.A., on Wissahickon Creek, in the N. part of the city. It is served by the Pennsylvania and the Philadelphia & Reading railways. There are many old colonial houses and handsome modern residences along Main Street (the old Germantown Road or Avenue). Prominent among the historic houses is Cliveden, or the "Chew House," built about 1761 by Benjamin Chew (1722-1810), who was chief-justice of Pennsylvania in 1774-1777 and was imprisoned as a Loyalist in 1777, and whose home during the battle of Germantown (see below) was occupied by British troops. The well-preserved Morris House (1772) was the headquarters of General Howe at the close of the battle, and in 1793, when Germantown, owing to the yellow fever in Philadelphia, was the temporary capital of the United States, it was occupied by President Washington. Three doors above stood until 1904 the Ashmead House, used for a time by Count Nicholas Lewis Zinzendorf and his daughters for their Moravian school, which was removed to Bethlehem. In the same street, opposite Indian Queen Lane, is the old Wister Mansion, built as a country-seat in 1744 and occupied by British officers during the War of Independence. In another old house (now Nos. 5275-5277), John Fanning Watson (1779-1860), the annalist of Philadelphia, did most of his literary work. Just outside the ward limits, in what has since become a part of Fairmont Park, is the house in which David Rittenhouse, the astronomer, was born; it stands on Monoshore Creek or Paper Mill Run, in what was long called Roxborough (now the 21st ward of Philadelphia). In this vicinity the first paper mill in America was erected in 1690 by a company of which William Rittenhouse, David's great-grandfather, was the leading member. The King of Prussia Inn, built about 1740, and the Mermaid Hotel, as old or older, are interesting survivals of the inns and taverns of old Germantown. The Germantown Academy was built in 1760, and after the battle of Germantown was used by the British as a hospital. In Germantown are also a Friends' (orthodox) school, a Friends' free library, and the Germantown branch of the Philadelphia public library. The first school in Germantown was established about 1701, and for the first eighteen years was under the mastership of Francis Daniel Pastorius (1651-1719), the leader in founding the town, who lived in a house that stood on the site of the present First Methodist Episcopal church, High Street and Main Street. He compiled a primer which was the first school book produced in the state; with three others he drafted and signed in 1688 what seems to have been the first public protest made in America against slavery; and he is celebrated in Whittier's *Pennsylvania Pilgrim*. Later the same school passed to Christopher Dock (d. 1771), who in 1770 published an essay on teaching (written in 1750), which is said to have been the first book on pedagogy published in America. The first Bible printed in America in any European language was published in Germantown in 1743 by Christopher Sauer (d. 1758), a preacher of the German Baptist Brethren, who in 1739 established Germantown's first newspaper, *The High German Pennsylvania Historian, or Collection of Important News from the Kingdom of Nature and of the Church*. His grandsons are said to have cast about 1772 the first American printing type. The Friends were the first sect to erect a meeting-house of their own (about 1693). The Mennonites built a log meeting-house in 1709, and their present stone church was built in 1770. The town hall of Germantown was used as a hospital during the last three years of the Civil War. In Market Square a soldiers' monument was erected in 1883. The Site and Relic Society of Germantown maintains a museum of relics. Many of the early settlers were linen weavers, and Germantown still manufactures textiles, knit goods and yarns.

Germantown was founded in October 1683 by thirteen families from Crefeld, Germany, under the leadership of Francis Daniel Pastorius. The township, as originally laid out, contained four distinct villages known as Germantown, Cresheim, Sommerhousen and Crefield. Cresheim was later known as Mount Airy, and Sommerhousen and Crefield became known as Chestnut Hill. The borough of Germantown was incorporated in 1689. For many years it was a straggling village extending about 2 m. along Main Street. Its growth was more rapid from the middle of the 18th century. In 1789 a motion for the permanent location of the national capital at Germantown was carried in the Senate, and the same measure passed the House, amended only with respect to the temporary government of the ceded district; but the Senate killed the bill by voting to postpone further consideration of it until the next session. Germantown was annexed to Philadelphia in 1854.

Battle of Germantown.—This famous encounter in the American War of Independence was fought on the 4th of October 1777. After the battle of Brandywine (*q.v.*) and the occupation of Philadelphia, the British force commanded by Sir W. Howe encamped at Germantown, where Washington determined to attack them. The Americans advanced by two roads, General Sullivan leading the column on the right and General Greene that on the left. Washington

himself accompanied Sullivan, with whom were Stirling (an officer who claimed to be earl of that name) and Anthony Wayne. The right at first met with success, driving the British advanced troops back on the main body near the Chew House. Colonel Musgrave, of the 40th Foot, threw a portion of his regiment into this house, and General Agnew came up with his command. The Americans under Stirling attempted to dislodge Musgrave, thus losing time and alarming part of Sullivan's advance who had pushed farther forward in the fog. General Greene on the left was even less fortunate. Meeting with unexpected opposition at the first point of attack his troops were thrown into confusion and compelled to retreat. One of his brigades extended itself to the right wing, and by opening fire on the Chew House caused Wayne to retreat, and presently both of the American columns retired rapidly in the direction of their camp. The surprise had failed, with the loss to Washington's army of 673 men as against 500 on the side of the British. The British General Agnew and the American General Nash were both mortally wounded. In December Washington went into winter quarters at Valley Forge, 40 m. west of Philadelphia. The British wintered in and around the city.

See N.H. Keyser, "Old Historic Germantown," in the *Proceedings and Addresses of the Pennsylvania-German Society* (Lancaster, 1906); S.W. Pennypacker, *The Settlement of Germantown, Pennsylvania, and the Beginning of German Emigration to North America* (Philadelphia, 1899), and S.F. Hotchkin, *Ancient and Modern Germantown, Mount Airy and Chestnut Hill* (Philadelphia, 1889).

GERMANY (Ger. *Deutschland*), or, more properly, The German Empire (*Deutsches Reich*), a country of central Europe. The territories occupied by peoples of distinctively Teutonic race and language are commonly designated as German, and in this sense may be taken to include, besides Germany proper (the subject of the present article), the German-speaking sections of Austria, Switzerland and Holland. But Germany, or the German empire, as it is now understood, was formed in 1871 by virtue of treaties between the North German Confederation and the South German states, and by the acquisition, in the peace of Frankfort (May 10, 1871), of Alsace-Lorraine, and embraces all the countries of the former German Confederation, with the exception of Austria, Luxemburg, Limburg and Liechtenstein. The sole addition to the empire proper since that date is the island of Heligoland, ceded by Great Britain in 1890, but Germany has acquired extensive colonies in Africa and the Pacific (see below, *Colonies*).

The German empire extends from 47° 16′ to 55° 53′ N., and from 5° 52′ to 22° 52′ E. The eastern provinces project so far that the extent of German territory is much greater from south-west to north-east than in any other direction. Tilsit is 815 m. from Metz, whereas Hadersleben, in Schleswig, is only 540 m. from the Lake of Constance. The actual difference in time between the eastern and western points is 1 hour and 8 minutes, but the empire observes but one time—1 hour E. of Greenwich. The empire is bounded on the S.E. and S. by Austria and Switzerland (for 1659 m.), on the S.W. by France (242 m.), on the W. by Luxemburg, Belgium and Holland (together 558 m.). The length of German coast on the North Sea or German Ocean is 293 m., and on the Baltic 927 m., the intervening land boundary on the north of Schleswig being only 47 m. The eastern boundary is with Russia 843 m. The total length of the frontiers is thus 4569 m. The area, including rivers and lakes but not the *haffs* or lagoons on the Baltic coast, is 208,830 sq. m., and the population (1905) 60,641,278. In respect of its area, the German empire occupied in 1909 the third place among European countries, and in point of population the second, coming in point of area immediately after Russia and Austria-Hungary, and in population next to Russia.

Political Divisions.—The empire is composed of the following twenty-six states and divisions: the kingdoms of Prussia, Bavaria, Saxony and Württemberg; the grand-duchies of Baden, Hesse, Mecklenburg-Schwerin, Mecklenburg-Strelitz, Oldenburg and Saxe-Weimar; the duchies of Anhalt, Brunswick, Saxe-Altenburg, Saxe-Coburg-Gotha and Saxe-Meiningen; the principalities of Lippe-Detmold, Reuss-Greiz, Reuss-Schleiz, Schaumburg-Lippe, Schwarzburg-Rudolstadt, Schwarzburg-Sondershausen and Waldeck-Pyrmont; the free towns of Bremen, Hamburg and Lübeck, and the imperial territory of Alsace-Lorraine.

Besides these political divisions there are certain parts of Germany which, not conterminous with political boundaries, retain appellations derived either from former tribal settlements or from divisions of the old Holy Roman Empire. These are Franconia (Franken), which embraces the districts of Bamberg, Schweinfurt and Würzburg on the upper Main; Swabia (Schwaben), in which is included Württemberg, parts of Bavaria and Baden and Hohenzollern; the Palatinate (Pfalz), embracing Bavaria west of the Rhine and the contiguous portion of Baden;

Rhineland, applied to Rhenish Prussia, Nassau, Hesse-Darmstadt and parts of Bavaria and Baden; Vogtland,[1] the mountainous country lying in the south-west corner of the kingdom of Saxony; Lusatia (Lausitz), the eastern portion of the kingdom of Saxony and the adjacent portion of Prussia watered by the upper Spree; Thuringia (Thüringen), the country lying south of the Harz Mountains and including the Saxon duchies; East Friesland (Ost Friesland), the country lying between the lower course of the Weser and the Ems, and Westphalia (Westfalen), the fertile plain lying north and west of the Harz Mountains and extending to the North Sea and the Dutch frontier.

Coast and Islands.—The length of the coast-line is considerably less than the third part of the whole frontier. The coasts are shallow, and deficient in natural ports, except on the east of Schleswig-Holstein, where wide bays encroach upon the land, giving access to the largest vessels, so that the great naval harbour could be constructed at Kiel. With the exception of those on the east coast of Schleswig-Holstein, all the important trading ports of Germany are river ports, such as Emden, Bremen, Hamburg, Lübeck, Stettin, Danzig, Königsberg, Memel. A great difference, however, is to be remarked between the coasts of the North Sea and those of the Baltic. On the former, where the sea has broken up the ranges of dunes formed in bygone times, and divided them into separate islands, the mainland has to be protected by massive dikes, while the Frisian Islands are being gradually washed away by the waters. On the coast of East Friesland there are now only seven of these islands, of which Norderney is best known, while of the North Frisian Islands, on the western coast of Schleswig, Sylt is the most considerable. Besides the ordinary waste of the shores, there have been extensive inundations by the sea within the historic period, the gulf of the Dollart having been so caused in the year 1276. Sands surround the whole coast of the North Sea to such an extent that the entrance to the ports is not practicable without the aid of pilots. Heligoland is a rocky island, but it also has been considerably reduced by the sea. The tides rise to the height of 12 or 13 ft. in the Jade Bay and at Bremerhaven, and 6 or 7 ft. at Hamburg. The coast of the Baltic, on the other hand, possesses few islands, the chief being Alsen and Fehmarn off the coast of Schleswig-Holstein, and Rügen off Pomerania. It has no extensive sands, though on the whole very flat. The Baltic has no perceptible tides; and a great part of its coast-line is in winter covered with ice, which also so blocks up the harbours that navigation is interrupted for several months every year. Its *haffs* fronting the mouths of the large rivers must be regarded as lagoons or extensions of the river beds, not as bays. The Pommersche or Oder Haff is separated from the sea by two islands, so that the river flows out by three mouths, the middle one (Swine) being the most considerable. The Frische Haff is formed by the Nogat, a branch of the Vistula, and by the Pregel, and communicates with the sea by means of the Pillauer Tief. The Kurische Haff receives the Memel, called Niemen in Russia, and has its outlet in the extreme north at Memel. Long narrow alluvial strips called *Nehrungen*, lie between the last two haffs and the Baltic. The Baltic coast is further marked by large indentations, the Gulf of Lübeck, that of Pomerania, east of Rügen, and the semicircular Bay of Danzig between the promontories of Rixhöft and Brüsterort. The German coasts are well provided with lighthouses.

Surface.—In respect of physical structure Germany is divided into two entirely distinct portions, which bear to one another a ratio of about 3 to 4. The northern and larger part may be described as a uniform plain. South and central Germany, on the other hand, is very much diversified in scenery. It possesses large plateaus, such as that of Bavaria, which stretches away from the foot of the Alps, fertile low plains like that intersected by the Rhine, mountain chains and isolated groups of mountains, comparatively low in height, and so situated as not seriously to interfere with communication either by road or by railway.

Mountains and plateaus.

Bavaria is the only division of the country that includes within it any part of the Alps, the Austro-Bavarian frontier running along the ridge of the Northern Tirolese or Bavarian Alps. The loftiest peak of this group, the Zugspitze (57 m. S. of Munich), is 9738 ft. in height, being the highest summit in the empire. The upper German plain sloping northwards from the Bavarian Alps is watered by the Lech, the Isar and the Inn, tributaries of the Danube, all three rising beyond the limits of German territory. This plain is separated on the west from the Swiss plain by the Lake of Constance (Bodensee, 1306 ft. above sea-level), and on the east from the undulating grounds of Austria by the Inn. The average height of the plain may be estimated at about 1800 ft., the valley of the Danube on its north border being from 1540 ft. (at Ulm) to 920 ft. (at Passau). The plain is not very fertile. In the upper part of the plain, towards the Alps, there are several lakes, the largest being the Ammersee, the Würmsee or Starnberger See and the Chiemsee. Many portions of the plain are covered by moors and swamps of large extent, called *Moose*. The left or northern bank of the Danube from Regensburg downwards presents a series of granitic rocks called the Bavarian Forest (Bayrischer Wald), which must be regarded as a branch of the Bohemian Forest (Böhmer Wald). The latter is a range of wooded heights on the frontier of Bavaria and Bohemia, occupying the least known and least frequented regions of Germany. The summits of the Bayrischer Wald rise to the height of about 4000 ft., and those of the Böhmer Wald to 4800 ft., Arber being 4872 ft. The valley of the Danube above Regensburg is flanked by

plateaus sloping gently to the Danube, but precipitous towards the valley of the Neckar. The centre of this elevated tract is the Rauhe Alb, so named on account of the harshness of the climate. The plateau continuing to the north-east and then to the north, under the name of the Franconian Jura, is crossed by the valley of the winding Altmühl, and extends to the Main. To the west extensive undulating grounds or low plateaus occupy the area between the Main and the Neckar.

The south-western corner of the empire contains a series of better defined hill-ranges. Beginning with the Black Forest (Schwarzwald), we find its southern heights decline to the valley of the Rhine, above Basel, and to the Jura. The summits are rounded and covered with wood, the highest being the Feldberg (10 m. S.E. of Freiburg, 4898 ft.). Northwards the Black Forest passes into the plateau of the Neckarbergland (average height, 1000 ft.). The heights between the lower Neckar and the Main form the Odenwald (about 1700 ft.); and the Spessart, which is watered by the Main on three sides, is nothing but a continuation of the Odenwald. West of this range of hills lies the valley of the upper Rhine, extending about 180 m. from south to north, and with a width of only 20 to 25 m. In the upper parts the Rhine is rapid, and therefore navigable with difficulty; this explains why the towns there are not along the banks of the river, but some 5 to 10 m. off. But from Spires (Speyer) town succeeds town as far down as Düsseldorf. The western boundary of this valley is formed in the first instance by the Vosges, where granite summits rise from under the surrounding red Triassic rocks (Sulzer Belchen, 4669 ft.). To the south the range is not continuous with the Swiss Jura, the valley of the Rhine being connected here with the Rhone system by low ground known as the Gate of Mülhausen. The crest of the Vosges is pretty high and unbroken, the first convenient pass being near Zabern, which is followed by the railway from Strassburg to Paris. On the northern side the Vosges are connected with the Hardt sandstone plateau (Kalmit, 2241 ft.), which rises abruptly from the plain of the Rhine. The mountains south of Mainz, which are mostly covered by vineyards, are lower, the Donnersberg, however, raising its head to 2254 ft. These hills are bordered on the west by the high plain of Lorraine and the coal-fields of Saarbrücken, the former being traversed by the river Mosel. The larger part of Lorraine belongs to France, but the German part possesses great mineral wealth in its rich layers of ironstone (siderite) and in the coal-fields of the Saar. The tract of the Hunsrück, Taunus and Eifel is an extended plateau, divided into separate sections by the river valleys. Among these the Rhine valley from Bingen to Bonn, and that of the Mosel from Trier to Coblenz, are winding gorges excavated by the rivers. The Eifel presents a sterile, thinly-peopled plateau, covered by extensive moors in several places. It passes westwards imperceptibly into the Ardennes. The hills on the right bank of the Rhine also are in part of a like barren character, without wood; the Westerwald (about 2000 ft.), which separates the valleys of the Sieg and Lahn, is particularly so. The northern and southern limits of the Niederrheinische Gebirge present a striking contrast to the central region. In the south the declivities of the Taunus (2890 ft.) are marked by the occurrence of mineral springs, as at Ems on the Lahn, Nauheim, Homburg, Soden, Wiesbaden, &c., and by the vineyards which produce the best Rhine wines. To the north of this system, on the other hand, lies the great coal basin of Westphalia, the largest in Germany. In the south of the hilly duchy of Hesse rise the isolated mountain groups of the Vogelsberg (2530 ft.) and the Rhön (3117 ft.), separated by the valley of the Fulda, which uniting farther north with the Werra forms the Weser. To the east of Hesse lies Thuringia, a province consisting of the far-stretching wooded ridge of the Thuringian Forest (Thüringerwald; with three peaks upwards of 3000 ft. high), and an extensive elevated plain to the north. Its rivers are the Saale and Unstrut. The plateau is bounded on the north by the Harz, an isolated group of mountains, rich in minerals, with its highest elevation in the bare summit of the Brocken (3747 ft.). To the west of the Harz a series of hilly tracts is comprised under the name of the Weser Mountains, out of which above Minden the river Weser bursts by the Porta Westphalica. A narrow ridge, the Teutoburger Wald (1300 ft.), extends between the Weser and the Ems as far as the neighbourhood of Osnabrück.

To the east the Thuringian Forest is connected by the plateau of the Frankenwald with the Fichtelgebirge. This group of mountains, occupying what may be regarded as ethnologically the centre of Germany, forms a hydrographical centre, whence the Naab flows southward to the Danube, the Main westward to the Rhine, the Eger eastward to the Elbe, and the Saale northward, also into the Elbe. In the north-east the Fichtelgebirge connects itself directly with the Erzgebirge, which forms the northern boundary of Bohemia. The southern sides of this range are comparatively steep; on the north it slopes gently down to the plains of Leipzig, but is intersected by the deep valleys of the Elster and Mulde. Although by no means fertile, the Erzgebirge is very thickly peopled, as various branches of industry have taken root there in numerous small places. Around Zwickau there are productive coal-fields, and mining for metals is carried on near Freiberg. In the east a tableland of sandstone, called Saxon Switzerland, from the picturesque outlines into which it has been eroded, adjoins the Erzgebirge; one of its most notable features is the deep ravine by which the Elbe escapes from it. Numerous quarries, which supply the North German cities with stone for buildings and monuments, have been opened along the valley. The sandstone range of the Elbe unites in the east with the low Lusatian group, along the east of which runs the best road from northern Germany to Bohemia.

Then comes a range of lesser hills clustering together to form the frontier between Silesia and Bohemia. The most western group is the Isergebirge, and the next the Riesengebirge, a narrow ridge of about 20 miles' length, with bare summits. Excluding the Alps, the Schneekoppe (5266 ft.) is the highest peak in Germany; and the southern declivities of this range contain the sources of the Elbe. The hills north and north-east of it are termed the Silesian Mountains. Here one of the minor coal-fields gives employment to a population grouped round a number of comparatively small centres. One of the main roads into Bohemia (the pass of Landshut) runs along the eastern base of the Riesengebirge. Still farther to the east the mountains are grouped around the hollow of Glatz, whence the Neisse forces its way towards the north. This hollow is shut in on the east by the Sudetic group, in which the Altvater rises to almost 4900 ft. The eastern portion of the group, called the Gesenke, slopes gently away to the valley of the Oder, which affords an open route for the international traffic, like that through the Mülhausen Gate in Alsace. Geographers style this the Moravian Gate.

The North German plain presents little variety, yet is not absolutely uniform. A row of low hills runs generally parallel to the mountain ranges already noticed, at a distance of 20 to 30 m. to the north. To these belongs the upper Silesian coal-basin, which occupies a considerable area in south-eastern Silesia. North of the middle districts of the Elbe country the heights are called the Fläming hills. Westward lies as the last link of this series the Lüneburger Heide or Heath, between the Weser and Elbe, north of Hanover. A second tract, of moderate elevation, sweeps round the Baltic, without, however, approaching its shores. This plateau contains a considerable number of lakes, and is divided into three portions by the Vistula and the Oder. The most eastward is the so-called Prussian Seenplatte. Spirdingsee (430 ft. above sea-level and 46 sq. m. in area) and Mauersee are the largest lakes; they are situated in the centre of the plateau, and give rise to the Pregel. Some peaks near the Russian frontier attain to 1000 ft. The Pomeranian Seenplatte, between the Vistula and the Oder, extends from S.W. to N.E., its greatest elevation being in the neighbourhood of Danzig (Turmberg, 1086 ft.). The Seenplatte of Mecklenburg, on the other hand, stretches from S.E. to N.W., and most of its lakes, of which the Müritz is the largest, send their waters towards the Elbe. The finely wooded heights which surround the bays of the east coast of Holstein and Schleswig may be regarded as a continuation of these Baltic elevations. The lowest parts, therefore, of the North German plain, excluding the sea-coasts, are the central districts from about 52° to 53° N. lat., where the Vistula, Netze, Warthe, Oder, Spree and Havel form vast swampy lowlands (in German called *Brüche*), which have been considerably reduced by the construction of canals and by cultivation, improvements due in large measure to Frederick the Great. The Spreewald, to the S.E. of Berlin, is one of the most remarkable districts of Germany. As the Spree divides itself there into innumerable branches, enclosing thickly wooded islands, boats form the only means of communication. West of Berlin the Havel widens into what are called the Havel lakes, to which the environs of Potsdam owe their charms. In general the soil of the North German plain cannot be termed fertile, the cultivation nearly everywhere requiring severe and constant labour. Long stretches of ground are covered by moors, and there turf-cutting forms the principal occupation of the inhabitants. The greatest extent of moorland is found in the westernmost parts of the plain, in Oldenburg and East Frisia. The plain contains, however, a few districts of the utmost fertility, particularly the tracts on the central Elbe, and the marsh lands on the west coast of Holstein and the north coast of Hanover, Oldenburg and East Frisia, which, within the last two centuries, the inhabitants have reclaimed from the sea by means of immense dikes.

Rivers.—Nine independent river-systems may be distinguished: those of the Memel, Pregel, Vistula (Weichsel), Oder, Elbe, Weser, Ems, Rhine and Danube. Of these the Pregel, Weser and Ems belong entirely, and the Oder mostly, to the German empire. The Danube has its sources on German soil; but only a fifth part of its course is German. Its total length is 1750 m., and the Bavarian frontier at Passau, where the Inn joins it, is only 350 m. distant from its sources. It is navigable as far as Ulm, 220 m. above Passau; and its tributaries the Lech, Isar, Inn and Altmühl are also navigable. The Rhine is the most important river of Germany, although neither its sources nor its mouths are within the limits of the empire. From the Lake of Constance to Basel (122 m.) the Rhine forms the boundary between the German empire and Switzerland; the canton of Schaffhausen, however, is situated on the northern bank of the river. From Basel to below Emmerich the Rhine belongs to the German empire—about 470 m. or four-sevenths of its whole course. It is navigable all this distance as are also the Neckar from Esslingen, the Main from Bamberg, the Lahn, the Lippe, the Ruhr, the Mosel from Metz, with its affluents the Saar and Sauer. Sea-going vessels sail up the Ems as far as Halte, and river craft as far as Greven, and the river is connected with a widely branching system of canals, as the Ems-Jade and Dortmund-Ems canals. The Fulda, navigable for 63 m., and the Werra, 38 m., above the point where they unite, form by their junction the Weser, which has a course of 271 m., and receives as navigable tributaries the Aller, the Leine from Hanover, and some smaller streams. Ocean-going steamers, however, cannot get as far as Bremen, and unload at Bremerhaven. The Elbe, after a course of 250 m., enters German territory near Bodenbach, 490 m. from its mouth. It is navigable above this point through its tributary, the Moldau, to Prague. Hamburg may be reached by vessels of 17 ft. draught. The navigable tributaries of the Elbe are the Saale (below

Naumburg), the Havel, Spree, Elde, Sude and some others. The Oder begins to be navigable almost on the frontier at Ratibor, 480 m. from its mouth, receiving as navigable tributaries the Glatz Neisse and the Warthe. Only the lower course of the Vistula belongs to the German empire, within which it is a broad, navigable stream of considerable volume. On the Pregel ships of 3000 tons reach Königsberg, and river barges reach Insterburg; the Alle, its tributary, may also be navigated. The Memel is navigable in its course of 113 m. from the Russian frontier. Germany is thus a country abounding in natural waterways, the total length of them being estimated at 7000 m. But it is only the Rhine, in its middle course, that has at all times sufficient volume of water to meet the requirements of a good navigable river.

Lakes.—The regions which abound in lakes have already been pointed out. The Lake of Constance or Bodensee (204¾ sq. m.) is on the frontier of the empire, portions of the northern banks belonging severally to Bavaria, Württemberg and Baden. In the south the largest lakes are the Chiemsee (33 sq. m.); the Ammersee and the Würmsee. A good many smaller lakes are to be found in the Bavarian Alps. The North German plain is dotted with upwards of 500 lakes, covering an area of about 2500 sq. m. The largest of these are the three Haffs—the Oder Haff covering 370 sq. m., the Frische Haff, 332, and the Kurische Haff, 626. The lakes in the Prussian and Pomeranian provinces, in Mecklenburg and in Holstein, and those of the Havel, have already been mentioned. In the west the only lakes of importance are the Steinhuder Meer, 14 m. north-west of Hanover, and the Dümmersee on the southern frontier of Oldenburg.

(P. A. A.)

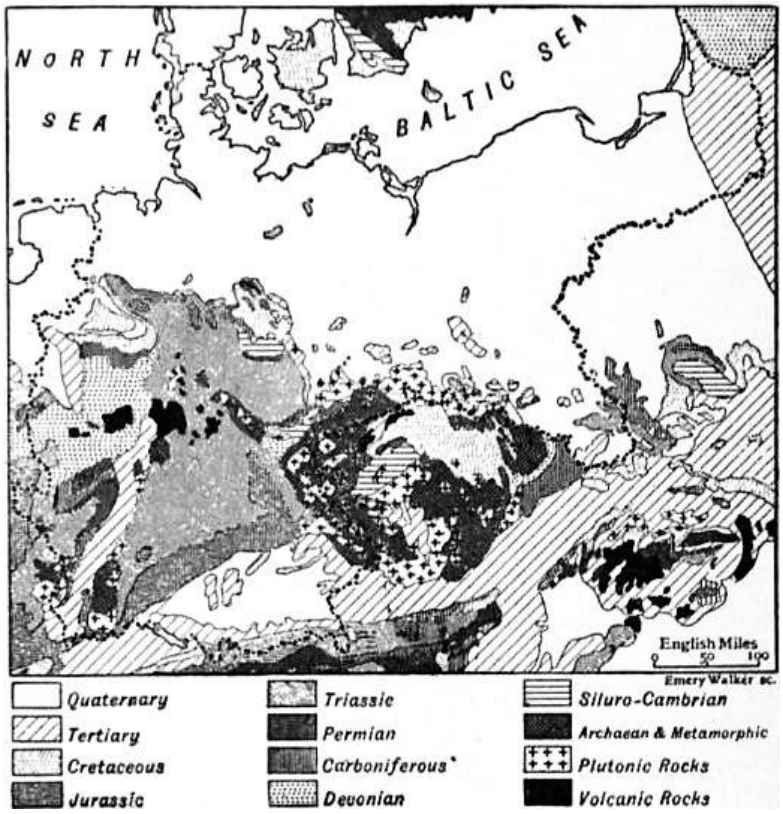
Geology.—Germany consists of a floor of folded Palaeozoic rocks upon which rest unconformably the comparatively little disturbed beds of the Mesozoic system, while in the North German plain a covering of modern deposits conceals the whole of the older strata from view, excepting some scattered and isolated outcrops of Cretaceous and Tertiary beds. The rocks which compose the ancient floor are thrown into folds which run approximately from W.S.W. to E.N.E. They are exposed on the one hand in the neighbourhood of the Rhine and on the other hand in the Bohemian *massif*. With the latter must be included the Frankenwald, the Thüringerwald, and even the Harz. The oldest rocks, belonging to the Archaean system, occur in the south, forming the Vosges and the Black Forest in the west, and the greater part of the Bohemian *massif*, including the Erzgebirge, in the east. They consist chiefly of gneiss and schist, with granite and other eruptive rocks. Farther north, in the Hunsrück, the Taunus, the Eifel and Westerwald, the Harz and the Frankenwald, the ancient floor is composed mainly of Devonian beds. Other Palaeozoic systems are, however, included in the folds. The Cambrian, for example, is exposed at Leimitz near Hof in the Frankenwald, and the important coal-field of the Saar lies on the southern side of the Hunsrück, while Ordovician and Silurian beds have been found in several localities. Along the northern border of the folded belt lies the coal basin of the Ruhr in Westphalia, which is the continuation of the Belgian coal-field, and bears much the same relation to the Rhenish Devonian area that the coal basin of Liége bears to the Ardennes. Carboniferous and Devonian beds are also found south-east of the Bohemian *massif*, where lies the extensive coal-field of Silesia. The Permian, as in England, is not involved in the folds which have affected the older beds, and in general lies unconformably upon them. It occurs chiefly around the masses of ancient rock, and one of the largest areas is that of the Saar.

Between the old rocks of the Rhine on the west and the ancient *massif* of Bohemia on the east a vast area of Triassic beds extends from Hanover to Basel and from Metz to Bayreuth. Over the greater part of this region the Triassic beds are free from folding and are nearly horizontal, but faulting is by no means absent, especially along the margins of the Bohemian and Rhenish hills. The Triassic beds must indeed have covered a large part of these old rock masses, but they have been preserved only where they were faulted down to a lower level. Along the southern margin of the Triassic area there is a long band of Jurassic beds dipping towards the Danube; and at its eastern extremity this band is continuous with a synclinal of Jurassic beds, running parallel to the western border of the Bohemian *massif*, but separated from it by a narrow strip of Triassic beds. Towards the north, in Hanover and Westphalia, the Triassic beds are followed by Jurassic and Cretaceous deposits, the latter being here the more important. As in the south of England, the lower beds of the Cretaceous are of estuarine origin and the Upper Cretaceous overlaps the Lower, lying in the valley of the Ruhr directly upon the Palaeozoic rocks. In Saxony also the upper Cretaceous beds rest directly upon the Palaeozoic or Archaean rocks. Still more to the east, in the province of Silesia, both Jurassic and Cretaceous beds are again met with, but they are to a large extent concealed by the recent accumulations of the great plain. The Eocene system is unknown in Germany except in the foothills of the Alps; but the Oligocene and Miocene are widely spread, especially in the great plain and in the depression of the Danube. The Oligocene is generally marine. Marine Miocene occurs in N.W. Germany and the Miocene of the Danube valley is also in part marine, but in central Germany it is of fluviatile or lacustrine origin. The lignites of Hesse, Cassel, &c., are interstratified with basaltic lava-flows which form the greater part of the Vogelsberg and other hills. The trachytes of the Siebengebirge are probably of slightly earlier date. The precise age of the volcanoes of the Eifel, many of which are in a very perfect state of preservation, is not clear, but they are certainly Tertiary or Post-tertiary. Leucite and nepheline lavas are here abundant. In the

Siebengebirge the little crater of Roderberg, with its lavas and scoriae of leucite-basalt, is posterior to some of the Pleistocene river deposits.

A glance at a geological map of Germany will show that the greater part of Prussia and of German Poland is covered by Quaternary deposits. These are in part of glacial origin, and contain Scandinavian boulders; but fluviatile and aeolian deposits also occur. Quaternary beds also cover the floor of the broad depression through which the Rhine meanders from Basel to Mainz, and occupy a large part of the plain of the Danube. The depression of the Rhine is a trough lying between two faults or system of faults. The very much broader depression of the Danube is associated with the formation of the Alps, and was flooded by the sea during a part of the Miocene period.

(P. La.)



Climate.—The climate of Germany is to be regarded as intermediate between the oceanic and continental climates of western and eastern Europe respectively. It has nothing in common with the Mediterranean climate of southern Europe, Germany being separated from that region by the lofty barrier of the Alps. Although there are very considerable differences in the range of temperature and the amount of rainfall throughout Germany, these are not so great as they would be were it not that the elevated plateaus and mountain chains are in the south, while the north is occupied by low-lying plains. In the west no chain of hills intercepts the warmer and moister winds which blow from the Atlantic, and these accordingly influence at times even the eastern regions of Germany. The mean annual temperature of south-western Germany, or the Rhine and Danube basins, is about 52° to 54° F., that of central Germany 48° to 50°, and that of the northern plain 46° to 48°. In Pomerania and West Prussia it is only 44° to 45°, and in East Prussia 42° to 44°. The mean January temperature varies between 22° and 34° (in Masuren and Cologne respectively); the mean July temperature, between 61° in north Schleswig and 68° at Cologne. The extremes of cold and heat are, as recorded in the ten years 1895-1905, 7° in Königsberg and 93° in Heidelberg (the hottest place in Germany). The difference in the mean annual temperature between the south-west and north-west of Germany amounts to about 3°. The contrasts of heat and cold are furnished by the valley of the Rhine above Mainz, which has the greatest mean heat, the mildest winter and the highest summer temperature, and the lake plateau of East Prussia, where Arys on the Spirdingsee has a like winter temperature to the Brocken at 3200 ft. The Baltic has the lowest spring temperature, and the autumn there is also not characterized by an appreciably higher degree of warmth. In central Germany the high plateaus of the Erz and Fichtelgebirge are the coldest regions. In south Germany the upper Bavarian plain experiences an inclement winter and a cold summer. In Alsace-Lorraine the Vosges and the plateau of Lorraine are also remarkable for low temperatures. The warmest districts of the German empire are the northern parts of the Rhine plain, from Karlsruhe downwards, especially the Rheintal; these are scarcely 300 ft. above the sea-level, and are protected by mountainous tracts of land. The same holds true of the valleys of the Neckar, Main and Mosel. Hence the vine is everywhere cultivated in these districts. The mean summer temperature there is 66° and upwards, while the average temperature of

January does not descend to the freezing point (32°). The climate of north-western Germany (west of the Elbe) shows a predominating oceanic character, the summers not being too hot (mean summer temperature 60° to 62°), and snow in winter remaining but a short time on the ground. West of the Weser the average temperature of January exceeds 32°; to the east it sinks to 30°, and therefore the Elbe is generally covered with ice for some months of the year, as are also its tributaries. The farther one proceeds to the east the greater are the contrasts of summer and winter. While the average summer warmth of Germany is 60° to 62°, the January temperature falls as low as 26° to 28° in West Prussia, Posen and Silesia, and 22° to 26° in East Prussia and upper Silesia. The navigation of the rivers is regularly interrupted by frost. Similarly the upper basin of the Danube, or the Bavarian plain, has a rather inclement climate in winter, the average for January being 25° to 26°.

As regards rainfall, Germany belongs to those regions where precipitation takes place at all seasons, but chiefly in the form of summer rains. In respect to the quantity of rain the empire takes a middle position between the humidity of north-western Europe and the aridity of the east. There are considerable differences between particular places. The rainfall is greatest in the Bavarian tableland and the hilly regions of western Germany. For the Eifel, Sauerland, Harz, Thuringian Forest, Rhön, Vogelsberg, Spessart, the Black Forest, the Vosges, &c., the annual average may be stated at 34 in. or more, while in the lower terraces of south-western Germany, as in the Erzgebirge and the Sudetic range, it is estimated at 30 to 32 in. only. The same average obtains also on the humid north-west coast of Germany as far as Bremen and Hamburg. In the remaining parts of western Germany, on the shores of farther Pomerania, and in East Prussia, it amounts to upwards of 24 in. In western Germany there is a district famous for the scarcity of rain and for producing the best kind of wine: in the valley of the Rhine below Strassburg, in the Palatinate, and also in the valley of the Main, no more than from 16 to 20 in. fall. Mecklenburg, Brandenburg and Lusatia, Saxony and the plateau of Thuringia, West Prussia, Posen and lower Silesia are also to be classed among the more arid regions of Germany, the annual rainfall being 16 to 20 in. Thunderstorms are most frequent in July, and vary between fifteen and twenty-five in the central districts, descending in the eastern provinces of Prussia to ten annually.

Flora.—The flora of Germany comprises 3413 species of phanerogamic and 4306 cryptogamic plants. The country forms a section of the central European zone, and its flora is largely under the influence of the Baltic and Alpine elements, which to a great degree here coalesce. All plants peculiar to the temperate zone abound. Wheat, rye, barley and oats are cultivated everywhere, but spelt only in the south and buckwheat in the north and north-west. Maize only ripens in the south. Potatoes grow in every part of the country, those of the sandy plains in the north being of excellent quality. All the commoner sorts of fruit—apples, pears, cherries, &c.—grow everywhere, but the more delicate kinds, such as figs, apricots and peaches, are confined to the warmer districts. The vine flourishes as far as the 51° N., but only yields good wine in the districts of the Rhine and Danube. Flax is grown in the north, and hemp more particularly in the central districts. Rape can be produced everywhere when the soil permits. Tobacco is cultivated on the upper Rhine and in the valley of the Oder. The northern plain, especially in the province of Saxony, produces beet (for sugar), and hops are largely grown in Bavaria, Württemberg, Alsace, Baden and the Prussian province of Posen.

Speaking generally, northern Germany is not nearly so well wooded as central and southern Germany, where indeed most of the lower mountains are covered with timber, as is indicated by the frequent use of the termination *wald* affixed to the names of the mountain ranges (as Schwarzwald, Thüringerwald, &c.). The “Seenplatten” are less wooded than the hill country, but the eastern portion of the northern lowlands is well provided with timber. A narrow strip along the shores of the Baltic is covered with oaks and beeches; farther inland, and especially east of the Elbe, coniferous trees are the most prevalent, particularly the Scotch fir; birches are also abundant. The mountain forests consist chiefly of firs, pines and larches, but contain also silver firs, beeches and oaks. Chestnuts and walnuts appear on the terraces of the Rhine valley and in Swabia and Franconia. The whole north-west of Germany is destitute of wood, but to compensate for this the people have ample supplies of fuel in the extensive stretches of turf.

Forests.

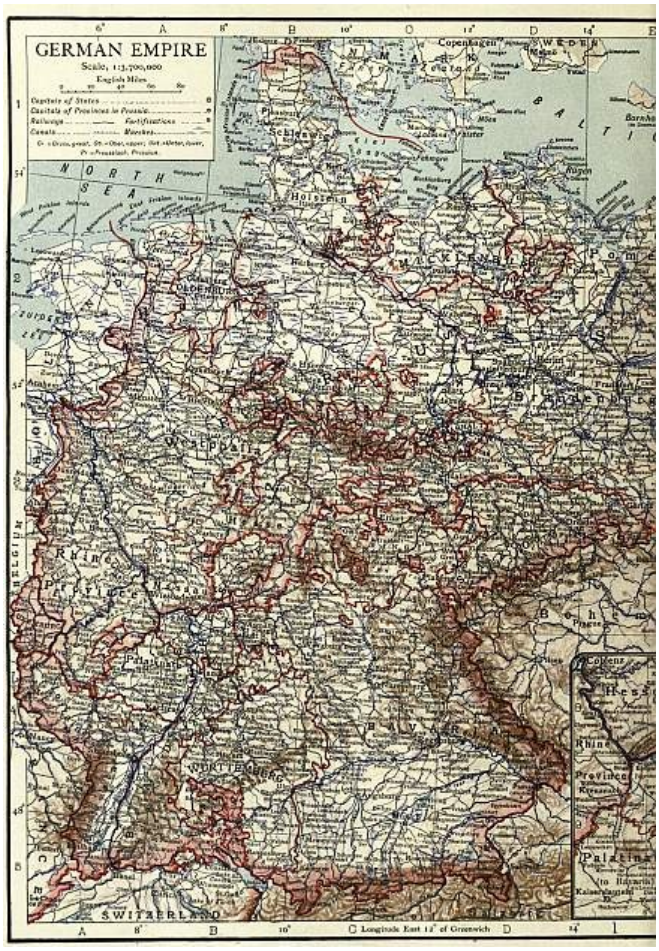
Fauna.—The number of wild animals in Germany is not very great. Foxes, martens, weasels, badgers and otters are to be found everywhere; bears are found in the Alps, wolves are rare, but they find their way sometimes from French territory to the western provinces, or from Poland to Prussia and Posen. Among the rodents the hamster and the field-mouse are a scourge to agriculture. Of game there are the roe, stag, boar and hare; the fallow deer and the wild rabbit are less common. The elk is to be found in the forests of East Prussia. The feathered tribes are everywhere abundant in the fields, woods and marshes. Wild geese and ducks, grouse, partridges, snipe, woodcock, quails, widgeons and teal are plentiful all over the country, and in recent years preserves have been largely stocked with pheasants. The length of time that birds of passage remain in Germany differs considerably with the different species. The stork is seen for about 170 days, the house-swallow 160, the snow-goose 260, the snipe 220. In northern Germany these birds arrive from twenty to thirty days later than in the south.

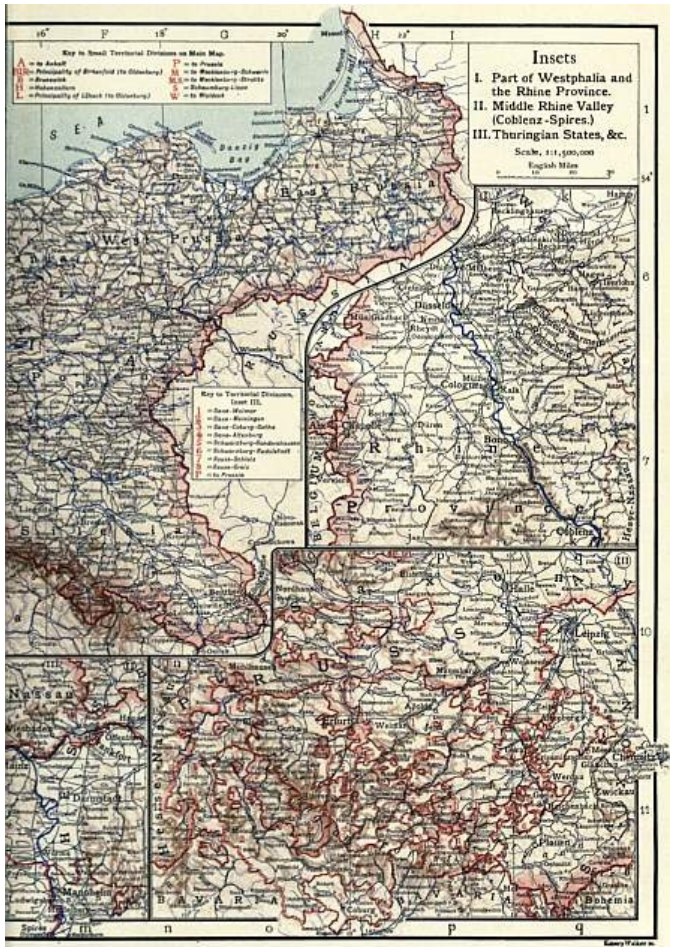
The waters of Germany abound with fish; but the genera and species are few. The carp and salmon tribes are the most abundant; after them rank the pike, the eel, the shad, the roach, the perch and the lamprey. The Oder and some of the tributaries of the Elbe abound in crayfish, and in the stagnant lakes of East Prussia leeches are bred. In addition to frogs, Germany has few varieties of Amphibia. Of serpents there are only two poisonous kinds, the common viper and the adder (*Kreuzotter*).

Population.—Until comparatively recent times no estimate of the population of Germany was precise enough to be of any value. At the beginning of the 19th century the country was divided into some hundred states, but there was no central agency for instituting an exact census on a uniform plan. The formation of the German Confederation in 1815 effected but little change in this respect, and it was left to the different states to arrange in what manner the census should be taken. On the foundation, however, of the German customs union, or *Zollverein*, between certain German states, the necessity for accurate statistics became apparent and care was taken to compile trustworthy tables. Researches show the population of the German empire, as at present constituted, to have been: (1816) 24,833,396; (1855) 36,113,644; and (1871) 41,058,792. The following table shows the population and area of each of the states included in the empire for the years 1871, 1875, 1900 and 1905:—

Area and Population of the German States.

States of the Empire.	Area English Sq. m.	Population.				Density per Sq. m.
		1871.	1875.	1900.	1905.	
Kingdoms—						
Prussia	134,616	24,691,433	25,742,404	34,472,509	37,293,324	277.3
Bavaria	29,292	4,863,450	5,022,390	6,176,057	6,524,372	222.7
Saxony	5,789	2,556,244	2,760,586	4,202,216	4,508,601	778.8
Württemberg	7,534	1,818,539	1,881,505	2,169,480	2,302,179	305.5
Grand-Duchies—						
Baden	5,823	1,461,562	1,507,179	1,867,944	2,010,728	345.3
Hesse	2,966	852,894	884,218	1,119,893	1,209,175	407.6
Mecklenburg-Schwerin	5,068	557,897	553,785	607,770	625,045	123.3
Saxe-Weimar	1,397	286,183	292,933	362,873	388,095	277.8
Mecklenburg-Strelitz	1,131	96,982	95,673	102,602	103,451	91.5
Oldenburg	2,482	314,459	319,314	399,180	438,856	176.8
Duchies—						
Brunswick	1,418	311,764	327,493	464,333	485,958	342.5
Saxe-Meiningen	953	187,957	194,494	250,731	268,916	282.2
Saxe-Altenburg	511	142,122	145,844	194,914	206,508	404.1
Saxe-Coburg-Gotha	764	174,339	182,599	229,550	242,432	317.3
Anhalt	888	203,437	213,565	316,085	328,029	369.4
Principalities—						
Schwartzburg-Sondershausen	333	75,523	76,676	80,898	85,152	255.7
Schwartzburg-Rudolstadt	363	67,191	67,480	93,059	96,835	266.7
Waldeck	433	56,224	54,743	57,918	59,127	136.5
Reuss-Greiz	122	45,094	46,985	68,396	70,603	578.7
Reuss-Schleiz	319	89,032	92,375	139,210	144,584	453.2
Schaumburg-Lippe	131	32,059	33,133	43,132	44,992	343.4
Lippe	469	111,135	112,452	138,952	145,577	310.4
Free Towns—						
Lübeck	115	52,158	56,912	96,775	105,857	920.5
Bremen	99	122,402	142,200	224,882	263,440	2661.0
Hamburg	160	338,974	388,618	768,349	874,878	5467.9
Imperial Territory—						
Alsace-Lorraine	5,604	1,549,738	1,531,804	1,719,470	1,814,564	323.8
German Empire	208,780	41,058,792	42,727,360	56,367,178	60,641,278	290.4





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The population of the empire has thus increased, since 1871, by 19,582,486 or 47.6%. The increase of population during 1895-1900 was greatest in Hamburg, Bremen, Lübeck, Saxony, Prussia and Baden, and least in Mecklenburg-Strelitz and Waldeck. Of the total population in 1900, 54.3% was urban (*i.e.* living in towns of 2000 inhabitants and above), leaving 45.7% to be classified as rural. On the 1st of December 1905, of the total population 29,884,681 were males and 30,756,597 females; and it is noticeable that the male population shows of late years a larger relative increase than the female, the male population having in five years increased by 2,147,434 and the female by only 2,126,666. The greater increase in the male population is attributable to diminished emigration and to the large increase in immigrants, who are mostly males. In 1905, 485,906 marriages were contracted in Germany, being at the rate of 8.0 per thousand inhabitants. In the same year the total number of births was 2,048,453. Of these, 61,300 were stillborn and 174,494 illegitimate, being at the rate, respectively, of 3% and 8.5% of the total. Illegitimacy is highest in Bavaria (about 15%), Berlin (14%), and over 12% in Saxony, Mecklenburg-Schwerin and Saxe-Meiningen. It is lowest in the Rhine Province and Westphalia (3.9 and 2.6 respectively). Divorce is steadily on the increase, being in 1904, 11.1 per 10,000 marriages, as against 8.1, 8.1, 9.3 and 10.1 for the four preceding years. The average deaths for the years 1901-1905 amounted to 1,227,903; the rate was thus 20.2 per thousand inhabitants, but the death-rate has materially decreased, the total number of deaths in 1907 standing at 1,178,349; the births for the same year were 2,060,974. In connexion with suicides, it is interesting to observe that the highest rates prevail in some of the smaller and more prosperous states of the empire—for example, in Saxe-Weimar, Saxe-Coburg-Gotha and Saxe-Altenburg (on a three years' average of figures), while the Roman Catholic country Bavaria, and the impoverished Prussian province of Posen show the most favourable statistics. For Prussia the rate is 20, and for Saxony it is as high as 31 per 100,000 inhabitants. The large cities, notably Berlin, Hamburg, Breslau and Dresden, show, however, relatively the largest proportion.

In 1900 the German-speaking population of the empire amounted to 51,883,131. Of the inhabitants speaking other languages there were: Polish, 3,086,489; French (mostly in Lorraine), 211,679; Masurian, 142,049; Danish, 141,061; Lithuanian, 106,305; Cassubian, 100,213; Wendish, 93,032; Dutch, 80,361; Italian, 65,961; Moravian, 64,382; Czech, 43,016; Frisian, 20,677; English, 20,217; Walloon, 11,841. In 1905 there were resident within the empire 1,028,560 subjects of foreign states, as compared with 778,698 in 1900. Of these 17,293 were subjects of Great Britain and Ireland, 17,184 of the United States of America and 20,584 of France. The bulk of the other foreigners residing in the country belonged to

countries lying contiguous, such as Austria, which claimed nearly the half, Russia and Italy.

Languages.—The German-speaking nations in their various branches and dialects, if we include the Dutch and the Walloons, extend in a compact mass along the shores of the Baltic and of the North Sea, from Memel in the east to a point between Gravelines and Calais near the Straits of Dover. On this northern line the Germans come in contact with the Danes who inhabit the northern parts of Schleswig within the limits of the German empire. A line from Flensburg south-westward to Joldelund and thence northwestward to Hoyer will nearly give the boundary between the two idioms.[2] The German-French frontier traverses Belgium from west to east, touching the towns of St Omer, Courtrai and Maastricht. Near Eupen, south of Aix-la-Chapelle, it turns southward, and near Arlon south-east as far as the crest of the Vosges mountains, which it follows up to Belfort, traversing there the watershed of the Rhine and the Doubs. In the Swiss territory the line of demarcation passes through Bienne, Fribourg, Saanen, Leuk and Monte Rosa. In the south the Germans come into contact with Rhaeto-Romans and Italians, the former inhabiting the valley of the Vorder-Rhein and the Engadine, while the latter have settled on the southern slopes of the Alps, and are continually advancing up the valley of the Adige. Carinthia and Styria are inhabited by German people, except the valley of the Drave towards Klagenfurt. Their eastern neighbours there are first the Magyars, then the northern Slavs and the Poles. The whole eastern frontier is very much broken, and cannot be described in a few words. Besides detached German colonies in Hungary proper, there is a considerable and compact German (Saxon) population in Transylvania. The river March is the frontier north of the Danube from Pressburg as far as Brünn, to the north of which the German regions begin near Olmütz, the interior of Bohemia and Moravia being occupied by Czechs and Moravians. In these countries the Slav language has been steadily superseding the German. In the Prussian provinces of Silesia and Posen the eastern parts are mixed territories, the German language progressing very slowly among the Poles. In Bromberg and Thorn, in the valley of the Vistula, German is prevalent. In West Prussia some parts of the interior, and in East Prussia a small region along the Russian frontier, are occupied by Poles (Cassubians in West Prussia, Masurians in East Prussia). The total number of German-speaking people, within the boundaries wherein they constitute the compact mass of the population, may be estimated, if the Dutch and Walloons be included, at 65 millions.

The geographical limits of the German language thus do not quite coincide with the German frontiers. The empire contains about 3⅓ millions of persons who do not make use of German in everyday life, not counting the resident foreigners.

Apart from the foreigners above mentioned, German subjects speaking a tongue other than German are found only in Prussia, Saxony and Alsace-Lorraine. The following table shows roughly the distribution of German-speaking people in the world outside the German empire:—

Austria-Hungary	12,000,000	Other European Countries	2,300,000
Netherlands (Dutch)	5,200,000	America	13,000,000
Belgium (Walloon)	4,000,000	Asia	100,000
Luxemburg	200,000	Africa	600,000
Switzerland	2,300,000	Australia	150,000
France	500,000		

According to the census of the 1st of December 1900 there were 51,634,757 persons speaking commonly one language and 248,374 speaking two languages. In the kingdom of Saxony, according to the census of 1900, there were 48,000 Wends, mostly in Lusatia. With respect to Alsace-Lorraine, detailed estimates (but no census) gave the number of French in the territory of Lorraine at about 170,000, and in that of Alsace at about 46,000.

The Poles have increased very much, owing to a greater surplus of births than in the case of the German people in the eastern provinces of Prussia, to immigration from Russia, and to the Polonization of many Germans through clerical and other influences (see *History*). The Poles are in the majority in upper Silesia (Government district of Oppeln; 55%) and the province of Posen (60%). They are numerous in West Prussia (34%) and East Prussia (14%).

The Wends are decreasing in number, as are also the Lithuanians on the eastern border of East Prussia, Czechs are only found in Silesia on the confines of Bohemia.

Russians flocked to Germany in thousands after the Russo-Japanese War and the insurrections in Russia, and the figures given for 1900 had been doubled in 1907. Males preponderate among the various nationalities, with the exception of the British, the larger proportion of whom are females either in domestic service or engaged in tuition.

Chief Towns.—According to the results of the census of the 1st of December 1905 there were within the empire 41 towns with populations exceeding 100,000, viz.:—

	State.	Population.

Berlin	Prussia	2,040,148
Hamburg	Hamburg	802,793
Munich	Bavaria	538,393
Dresden	Saxony	516,996
Leipzig	”	502,570
Breslau	Prussia	470,751
Cologne	”	428,503
Frankfort-on-Main	”	334,951
Nuremberg	Bavaria	294,344
Düsseldorf	Prussia	253,099
Hanover	”	250,032
Stuttgart	Württemberg	249,443
Chemnitz	Saxony	244,405
Magdeburg	Prussia	240,661
Charlottenburg	”	239,512
Essen	”	231,396
Stettin	”	224,078
Königsberg	”	219,862
Bremen	Bremen	214,953
Duisburg	Prussia	192,227
Dortmund	”	175,575
Halle	”	169,899
Altona	”	168,301
Strassburg	Alsace-Lorraine	167,342
Kiel	Prussia	163,710
Elberfeld	”	162,682
Mannheim	Baden	162,607
Danzig	Prussia	159,685
Barmen	”	156,148
Rixdorf	”	153,650
Gelsenkirchen	”	147,037
Aix-la-Chapelle	”	143,906
Schöneberg	”	140,992
Brunswick	Brunswick	136,423
Posen	Prussia	137,067
Cassel	”	120,446
Bochum	”	118,455
Karlsruhe	Baden	111,200
Crefeld	Prussia	110,347
Plauen	Saxony	105,182
Wiesbaden	Prussia	100,953

Density of Population.—In respect of density of population, Germany with (1900) 269.9 and (1905) 290.4 inhabitants to the square mile is exceeded in Europe only by Belgium, Holland and England. Apart from the free cities, Hamburg, Bremen and Lübeck, the kingdom of Saxony is the most, and Mecklenburg-Strelitz the least, closely peopled state of the empire. The most thinly populated districts are found, not as might be expected in the mountain regions, but in some parts of the plains. Leaving out of account the small centres, Germany may be roughly divided into two thinly and two densely populated parts. In the former division has to be classed all the North German plain. There it is only in the valleys of the larger navigable rivers and on the southern border of the plain that the density exceeds 200 inhabitants per square mile. In some places, indeed, it is far greater, *e.g.* at the mouths of the Elbe and the Weser, in East Holstein, in the delta of the Memel and the environs of Hamburg. This region is bordered on the south by a densely peopled district, the northern boundary of which may be defined by a line from Coburg via Cassel to Münster, for in this part there are not only very fertile districts, such as the *Goldene Aue* in Thuringia, but also centres of industry. The population is thickest in upper Silesia around Beuthen (coal-fields), around Ratibor, Neisse and Waldenburg (coal-fields), around Zittau (kingdom of Saxony), in the Elbe valley around Dresden, in the districts of Zwickau and Leipzig as far as the Saale, on the northern slopes of the Harz and around Bielefeld in Westphalia. In all these the density exceeds 400 inhabitants to the square mile, and in the case of Saxony rises to 750. The third division of Germany comprises the basin of the Danube and Franconia, where around Nuremberg, Bamberg and Würzburg the population is thickly clustered. The fourth division embraces the valleys of the upper Rhine and Neckar and the district of Düsseldorf on the lower Rhine. In this last the proportion exceeds 1200 inhabitants to the square mile.

Emigration.—There have been great oscillations in the actual emigration by sea. It first exceeded 100,000 soon after the Franco-German War (1872, 126,000), and this occurred again in the years 1880 to 1892. Germany lost during these thirteen years more than 1,700,000

inhabitants by emigration. The total number of those who sailed for the United States from 1820 to 1900 may be estimated at more than 4,500,000. The number of German emigrants to Brazil between 1870 and 1900 was about 52,000. The greater number of the more recent emigrants was from the agricultural provinces of northern Germany—West Prussia, Posen, Pomerania, Mecklenburg, Schleswig-Holstein and Hanover, and sometimes the emigration reached 1% of the total population of these provinces. In subsequent years the emigration of native Germans greatly decreased and, in 1905, amounted only to 28,075. But to this number must be added 284,787 foreigners who in that year were shipped from German ports (notably Hamburg and Bremen) to distant parts. Of the above given numbers of purely German emigrants 26,007 sailed for the United States of America; 243 to Canada; 333 to Brazil; 674 to the Argentine Republic; 7 to other parts of America; 57 to Africa; and 84 to Australia.

Agriculture.—Despite the enormous development of industries and commerce, agriculture and cattle-rearing still represent in Germany a considerable portion of its economic wealth. Almost two-thirds of the soil is occupied by arable land, pastures and meadows, and of the whole area, in 1900, 91% was classed as productive. Of the total area 47.67% was occupied by land under tillage, 0.89% by gardens, 11.02% by meadow-land, 5.01% by pastures, and 0.25% by vineyards. The largest estates are found in the Prussian provinces of Pomerania, Posen and Saxony, and in East and West Prussia, while in the Prussian Rhine province, in Baden and Württemberg small farms are the rule.

The same kinds of cereal crops are cultivated in all parts of the empire, but in the south and west wheat is predominant, and in the north and east rye, oats and barley. To these in some districts are added spelt, buckwheat, millet, rice-wheat, lesser spelt and maize. In general the soil is remarkably well cultivated. The three years' rotation formerly in use, where autumn and spring-sown grain and fallow succeeded each other, has now been abandoned, except in some districts, where the system has been modified and improved. In south Germany the so-called *Fruchtwechsel* is practised, the fields being sown with grain crops every second year, and with pease or beans, grasses, potatoes, turnips, &c., in the intermediate years. In north Germany the mixed *Koppelwirthschaft* is the rule, by which system, after several years of grain crops, the ground is for two or three seasons in pasture.

Taking the average of the six years 1900-1905, the crop of wheat amounted to 3,550,033 tons (metric), rye to 9,296,616 tons, barley to 3,102,883 tons, and oats to 7,160,883 tons. But, in spite of this considerable yield in cereals, Germany cannot cover her home consumption, and imported on the average of the six years 1900-1905 about 4½ million tons of cereals to supply the deficiency. The potato is largely cultivated, not merely for food, but for distillation into spirits. This manufacture is prosecuted especially in eastern Germany. The number of distilleries throughout the German empire was, in 1905-1906, 68,405. The common beet (*Beta vulgaris*) is largely grown in some districts for the production of sugar, which has greatly increased of recent years. There are two centres of the beet sugar production: Magdeburg for the districts Prussian Saxony, Hanover, Brunswick, Anhalt and Thuringia, and Frankfort-on-Oder at the centre of the group Silesia, Brandenburg and Pomerania. Flax and hemp are cultivated, though not so much as formerly, for manufacture into linen and canvas, and also rape seed for the production of oil. The home supply of the former no longer suffices for the native demand. The cultivation of hops is in a very thriving condition in the southern states of Germany. The soil occupied by hops was estimated in 1905 at 98,000 acres—a larger area than in Great Britain, which had in the same year about 48,000 acres. The total production of hops was 29,000 tons in 1905, and of this over 25,000 were grown in Bavaria, Württemberg, Baden and Alsace-Lorraine. Almost the whole yield in hops is consumed in the country by the great breweries.

Tobacco forms a most productive and profitable object of culture in many districts. The total extent under this crop in 1905 was about 35,000 acres, of which 45% was in Baden, 12% in Bavaria, 30% in Prussia, and the rest in Alsace and Hesse-Darmstadt. In the north the plant is cultivated principally in Pomerania, Brandenburg and East and West Prussia. Of late years the production has somewhat diminished, owing to the extensive tobacco manufacturing industries of Bremen and Hamburg, which import almost exclusively foreign leaves.

Ulm, Nuremberg, Quedlinburg, Erfurt, Strassburg and Guben are famed for their vegetables and garden seeds. Berlin is noted for its flower nurseries, the Rhine valley, Württemberg and the Elbe valley below Dresden for fruit, and Frankfort-on-main for cider.

The culture of the vine is almost confined to southern and western Germany, and especially to the Rhine district. The northern limits of its growth extend from Bonn in a north-easterly direction through Cassel to the southern foot of the Harz, crossing 52° N. on the Elbe, running then east some miles to the north of that parallel, and finally turning sharply towards the south-west on the Warthe. In the valley of the Saale and Elbe (near Dresden), and in lower Silesia (between Guben and Grünberg), the number of vineyards is small, and the wines of inferior quality; but along the Rhine from Basel to Coblenz, in Alsace, Baden, the Palatinate and Hesse, and above all in the province of Nassau, the lower slopes of the hills are literally covered with vines. Here are produced the celebrated

Vine.

Rüdesheimer, Hochheimer and Johannisberger. The vines of the lower Main, particularly those of Würzburg, are the best kinds; those of the upper Main and the valley of the Neckar are rather inferior. The Moselle wines are lighter and more acid than those of the Rhine. The total amount produced in Germany is estimated at 1000 million gallons, of a value of £4,000,000; Alsace-Lorraine turning out 400 millions; Baden, 175; Bavaria, Württemberg and Hesse together, 300; while the remainder, which though small in quantity is in quality the best, is produced by Prussia.

Live stock.

The cultivation of grazing lands in Germany has been greatly improved in recent times and is in a highly prosperous condition. The provinces of Schleswig-Holstein, Pomerania, Hanover (especially the marsh-lands near the sea) and the grand-duchy of Mecklenburg-Schwerin are particularly remarkable in this respect. The best meadow-lands of Bavaria are in the province of Franconia and in the outer range of the Alps, and those of Saxony in the Erzgebirge. Württemberg, Hesse and Thuringia also yield cattle of excellent quality. These large cattle-rearing centres not only supply the home markets but export live stock in considerable quantities to England and France. Butter is also largely exported to England from the North Sea districts and from Schleswig-Holstein and Mecklenburg. The breeding of horses has attained a great perfection. The main centre is in East and West Prussia, then follow the marsh districts on the Elbe and Weser, some parts of Westphalia, Oldenburg, Lippe, Saxony and upper Silesia, lower Bavaria and Alsace-Lorraine. Of the stud farms Trakehnen in East Prussia and Graditz in the Prussian province of Saxony enjoy a European reputation. The aggregate number of sheep has shown a considerable falling off, and the rearing of them is mostly carried on only on large estates, the number showing only 9,692,501 in 1900, and 7,907,200 in 1904, as against 28,000,000 in 1860. As a rule, sheep-farming is resorted to where the soil is of inferior quality and unsuitable for tillage and the breeding of cattle. Far more attention is accordingly given to sheep-farming in northern and north-eastern Germany than in Schleswig-Holstein, Westphalia, the Rhineland and south Germany. The native demand for wool is not covered by the home production, and in this article the export from the United Kingdom to Germany is steadily rising, having amounted in 1905 to a value of £1,691,035, as against £742,632 in 1900. The largest stock of pigs is in central Germany and Saxony, in Westphalia, on the lower Rhine, in Lorraine and Hesse. Central Germany (especially Gotha and Brunswick) exports sausages and hams largely, as well as Westphalia, but here again considerable importation takes place from other countries. Goats are found everywhere, but especially in the hilly districts. Poultry farming is a considerable industry, the geese of Pomerania and the fowls of Thuringia and Lorraine being in especial favour. Bee-keeping is of considerable importance, particularly in north Germany and Silesia.

On the whole, despite the prosperous condition of the German live-stock farming, the consumption of meat exceeds the amount rendered available by home production, and prices can only be kept down by a steady increase in the imports from abroad.

Fisheries.—The German fisheries, long of little importance, have been carefully fostered within recent years. The deep-sea fishing in the North Sea, thanks to the exertions of the German fishing league (*Deutscher Fischereiverein*) and to government support, is extremely active. Trawlers are extensively employed, and steamers bring the catches directly to the large fish markets at Geestemünde and Altona, whence facilities are afforded by the railways for the rapid transport of fish to Berlin and other centres. The fish mostly caught are cod, haddock and herrings, while Heligoland yields lobsters, and the islands of Föhr, Amrum and Sylt oysters of good quality. The German North Sea fishing fleet numbered in 1905 618 boats, with an aggregate crew of 5441 hands. Equally well developed are the Baltic fisheries, the chief ports engaged in which are Danzig, Eckernförde, Kolberg and Travemünde. The principal catch is haddock and herrings. The catch of the North Sea and Baltic fisheries in 1906 was valued at over £700,000, exclusive of herrings for salting. The fisheries do not, however, supply the demand for fish, and fresh, salt and dried fish is imported largely in excess of the home yield.

Mines and Minerals.—Germany abounds in minerals, and the extraordinary industrial development of the country since 1870 is largely due to its mineral wealth. Having left France much behind in this respect, it now rivals Great Britain and the United States.

Germany produces more silver than any other European state, and the quantity is annually increasing. It is extracted from the ores in the mines of Freiburg (Saxony), the Harz Mountains, upper Silesia, Merseburg, Aix-la-Chapelle, Wiesbaden and Arnsberg. Gold is found in the sand of the rivers Isar, Inn and Rhine, and also, to a limited extent, on the Harz. The quantity yielded in 1905 was, of silver, about 400 tons of a value of £1,600,000, and gold, about 4 tons, valued at about £548,000.

Lead is produced in considerable quantities in upper Silesia, the Harz Mountains, in the Prussian province of Nassau, in the Saxon Erzgebirge and in the Sauerland. The yield in 1905 amounted to about 153,000 tons; of which 20,000 tons were exported.

Copper is found principally in the Mansfeld district of the Prussian province of Saxony and near Arnsberg in the Sauerland, the ore yielding 31,713 tons in 1905, of which 5000 tons were exported.

About 90% of the zinc produced in Europe is yielded by Belgium and Germany. It is mostly found in upper Silesia, around Beuthen, and in the districts of Wiesbaden and Aix-la-Chapelle. In 1905 no less than 198,000 tons of block zinc were produced, of which 16,500 tons were exported.

Of other minerals (with the exceptions of coal, iron and salt treated below) nickel and antimony are found in the upper Harz; cobalt in the hilly districts of Hesse and the Saxon Erzgebirge; arsenic in the Riesengebirge; quicksilver in the Sauerland and in the spurs of the Saarbrücken coal hills; graphite in Bavaria; porcelain clay in Saxony and Silesia; amber along the whole Baltic coast; and lime and gypsum in almost all parts.

Coal.

Coal-mining appears to have been first practised in the 14th century at Zwickau (Saxony) and on the Ruhr. There are six large coal-fields, occupying an area of about 3600 sq. m., of which the most important occupies the basin of the Ruhr, its extent being estimated at 2800 sq. m. Here there are more than 60 beds, of a total thickness of 150 to 200 ft. of coal; and the amount in the pits has been estimated at 45,000 millions of tons. Smaller fields are found near Osnabrück, Ibbenbüren and Minden, and a larger one near Aix-la-Chapelle. The Saar coal-field, within the area enclosed by the rivers Saar, Nahe and Blies (460 sq. m.), is of great importance. The thickness of 80 beds amounts to 250 ft., and the total mass of coal is estimated at 45,400 million tons. The greater part of the basin belongs to Prussia, the rest to Lorraine. A still larger field exists in the upper Silesian basin, on the borderland between Austria and Poland, containing about 50,000 million tons. Beuthen is the chief centre. The Silesian coal-fields have a second centre in Waldenburg, east of the Riesengebirge. The Saxon coal-fields stretch eastwards for some miles from Zwickau. Deposits of less consequence are found in upper Bavaria, upper Franconia, Baden, the Harz and elsewhere.

The following table shows the rapidly increasing development of the coal production. That of lignite is added, the provinces of Saxony and Brandenburg being rich in this product:—

Production of Coal and Lignite.

Year.	Coal.			Lignite.		
	Quantities.	Value.	Hands.	Quantities.	Value.	Hands.
	Mill. Tons.	Mill. Mks.		Mill. Tons.	Mill. Mks.	
1871	29.4	218.4	. .	8.5	26.2	. .
1881	48.7	252.3	180,000	12.8	38.1	25,600
1891	73.7	589.5	283,000	20.5	54.2	35,700
1899	101.6	789.6	379,000	34.2	78.4	44,700
1900	109.3	966.1	414,000	40.5	98.5	50,900
1905	121.2	1049.9	490,000	52.5	122.2	52,800

This production permits a considerable export of coal to the west and south of the empire, but the distance from the coal-fields to the German coast is such that the import of British coal cannot yet be dispensed with (1905, over 7,000,000 tons). Besides this, from 7,000,000 to 8,000,000 tons of lignite come annually from Bohemia. In north Germany peat is also of importance as a fuel; the area of the peat moors in Prussia is estimated at 8000 sq. m., of which 2000 are in the north of Hanover.

The iron-fields of Germany fall into three main groups: those of the lower Rhine and Westphalia, of which Dortmund and Düsseldorf are the centres; those of Lorraine and the Saar; and those of upper Silesia. The output of the ore has enormously increased of recent years, and the production of pig iron, as given for 1905, amounted to 10,875,000 tons of a value of £28,900,000.

Germany possesses abundant salt deposits. The actual production not only covers the home consumption, but also allows a yearly increasing exportation, especially to Russia, Austria and Scandinavia. The provinces of Saxony and Hanover, with Thuringia and Anhalt, produce half the whole amount. A large salt-work is found at Strzalkowo (Posen), and smaller ones near Dortmund, Lippstadt and Minden (Westphalia). In south Germany salt abounds most in Württemberg (Hall, Heilbronn, Rottweil); the principal Bavarian works are at the foot of the Alps near Freilassing and Rosenheim. Hesse and Baden, Lorraine and the upper Palatinate have also salt-works. The total yield of mined salt amounted in 1905 to 6,209,000 tons, including 1,165,000 tons of rock salt. The production has made great advance, having in 1850 been only 5 million cwts.

Manufactures.—In no other country of the world has the manufacturing industry made such rapid strides within recent years as in Germany. This extraordinary development of industrial energy embraces practically all classes of manufactured articles. In a general way the chief manufactures may be geographically distributed as follows. Prussia, Alsace-Lorraine, Bavaria

and Saxony are the chief seats of the iron manufacture. Steel is produced in Rhenish Prussia. Saxony is predominant in the production of textiles, though Silesia and Westphalia manufacture linen. Cotton goods are largely produced in Baden, Bavaria, Alsace-Lorraine and Württemberg, woollens and worsteds in Saxony and the Rhine province, silk in Rhenish Prussia (Elberfeld), Alsace and Baden. Glass and porcelain are largely produced in Bavaria; lace in Saxony; tobacco in Bremen and Hamburg; chemicals in the Prussian province of Saxony; watches in Saxony (Glashütte) and Nuremberg; toys in Bavaria; gold and silver filagree in Berlin and Aschaffenburg; and beer in Bavaria and Prussia.

Iron industry.

It is perhaps more in respect of its iron industry than of its other manufactures that Germany has attained a leading position in the markets of the world. Its chief centres are in Westphalia and the Rhine province (*auf roter Erde*), in upper Silesia, in Alsace-Lorraine and in Saxony. Of the total production of pig iron in 1905 amounting to over 10,000,000 tons, more than the half was produced in the Rhineland and Westphalia. Huge blast furnaces are in constant activity, and the output of rolled iron and steel is constantly increasing. In the latter the greatest advance has been made. The greater part of it is produced at or around Essen, where are the famous Krupp works, and Bochum. Many states have been for a considerable time supplied by Krupp with steel guns and battleship plates. The export of steel (railway) rails and bridges from this part is steadily on the increase.

Hardware also, the production of which is centred in Solingen, Heilbronn, Esslingen, &c., is largely exported. Germany stands second to Great Britain in the manufacture of machines and engines. There are in many large cities of north Germany extensive establishments for this purpose, but the industry is not limited to the large cities. In agricultural machinery Germany is a serious competitor with England. The locomotives and wagons for the German railways are almost exclusively built in Germany; and Russia, as well as Austria, receives large supplies of railway plant from German works. In shipbuilding, likewise, Germany is practically independent, yards having been established for the construction of the largest vessels.

Cotton and textiles.

Before 1871 the production of cotton fabrics in France exceeded that in Germany, but as the cotton manufacture is pursued largely in Alsace, the balance is now against the former country. In 1905 there were about 9,000,000 spindles in Germany. The export of the goods manufactured amounted in this year to an estimated value of £19,600,000. Cotton spinning and weaving are not confined to one district, but are prosecuted in upper Alsace (Mülhausen, Gebweiler, Colmar), in Saxony (Zwickau, Chemnitz, Annaberg), in Silesia (Breslau, Liegnitz), in the Rhine province (Düsseldorf, Münster, Cologne), in Erfurt and Hanover, in Württemberg (Reutlingen, Cannstatt), in Baden, Bavaria (Augsburg, Bamberg, Bayreuth) and in the Palatinate.

Although Germany produces wool, flax and hemp, the home production of these materials is not sufficient to meet the demand of manufactures, and large quantities of them have to be imported. In 1895 almost a million persons (half of them women) were employed in this branch of industry, and in 1897 the value of the cloth, buckskin and flannel manufacture was estimated at £18,000,000. The chief seats of this manufacture are the Rhenish districts of Aix-la-Chapelle, Düren, Eupen and Lennep, Brandenburg, Saxony, Silesia and lower Lusatia, the chief centres in this group being Berlin, Cottbus, Spremberg, Sagan and Sommerfeld.

The manufacture of woollen and half-woollen dress materials centres mainly in Saxony, Silesia, the Rhine province and in Alsace. Furniture covers, table covers and plush are made in Elberfeld and Chemnitz, in Westphalia and the Rhine province (notably in Elberfeld and Barmen); shawls in Berlin and the Bavarian Vogtland; carpets in Berlin, Barmen and Silesia. In the town of Schmiedeberg in the last district, as also in Cottbus (Lusatia), oriental patterns are successfully imitated. The chief seats of the stocking manufacture are Chemnitz and Zwickau in Saxony, and Apolda in Thuringia. The export of woollen goods from Germany in 1905 amounted to a value of £13,000,000.

Although linen was formerly one of her most important articles of manufacture, Germany is now left far behind in this industry by Great Britain, France and Austria-Hungary. This branch of textile manufacture has its principal centres in Silesia, Westphalia, Saxony and Württemberg, while Hirschberg in Silesia, Bielefeld in Westphalia and Zittau in Saxony are noted for the excellence of their productions. The goods manufactured, now no longer, as formerly, coarse in texture, vie with the finer and more delicate fabrics of Belfast. In the textile industry for flax and hemp there were, in 1905, 276,000 fine spindles, 22,300 hand-looms and 17,600 power-looms in operation, and, in 1905, linen and jute materials were exported of an estimated value of over £2,000,000. The jute manufacture, the principal centres of which are Berlin, Bonn, Brunswick and Hamburg, has of late attained considerable dimensions.

Raw silk can scarcely be reckoned among the products of the empire, and the annual demand has thus to be provided for by importation. The main centre of the silk industry is Crefeld and its neighbourhood; then come Elberfeld and Barmen, Aix-la-Chapelle, as well as Berlin, Bielefeld, Chemnitz, Stuttgart and the district around Mülhausen in Alsace.

The manufacture of paper is prosecuted almost everywhere in the empire. There were 1020

mills in operation in 1895, and the exports in 1905 amounted to more than £3,700,000 sterling, as against imports of a value of over £700,000. The manufacture is carried on to the largest extent in the Rhine province, in Saxony and in Silesia. Wall papers are produced chiefly in Rhenish Prussia, Berlin and Hamburg; the finer sorts of letter-paper in Berlin, Leipzig and Nuremberg; and printing-paper (especially for books) in Leipzig, Berlin and Frankfort-on-Main.

Paper.

The chief seat of the leather industry is Hesse-Darmstadt, in which Mainz and Worms produce excellent material. In Prussia large factories are in operation in the Rhine province, in Westphalia and Silesia (Brieg). Boot and shoe manufactures are carried on everywhere; but the best goods are produced by Mainz and Pirmasens. Gloves for export are extensively made in Württemberg, and Offenbach and Aschaffenburg are renowned for fancy leather wares, such as purses, satchels and the like.

Leather.

Berlin and Mainz are celebrated for the manufacture of furniture; Bavaria for toys; the Black Forest for clocks; Nuremberg for pencils; Berlin and Frankfort-on-Main for various perfumes; and Cologne for the famous eau-de-Cologne.

The beetroot sugar manufacture is very considerable. It centres mainly in the Prussian province of Saxony, where Magdeburg is the chief market for the whole of Germany, in Anhalt, Brunswick and Silesia. The number of factories was, in 1905, 376, and the amount of raw sugar and molasses produced amounted to 2,643,531 metric tons, and of refined sugar 1,711,063 tons.

Sugar.

Beer is produced throughout the whole of Germany. The production is relatively greatest in Bavaria. The *Brausteuergebiet* (beer excise district) embraces all the states forming the Zollverein, with the exception of Bavaria, Württemberg, Baden and Alsace-Lorraine, in which countries the excise duties are separately collected. The total number of breweries in the beer excise district was, in 1905-1906, 5995, which produced 1017 million gallons; in Bavaria nearly 6000 breweries with 392 million gallons; in Baden over 700 breweries with 68 million gallons; in Württemberg over 5000 breweries with 87 million gallons; and in Alsace-Lorraine 95 breweries with about 29 million gallons. The amount brewed per head of the population amounted, in 1905, roughly to 160 imperial pints in the excise district; to 450 in Bavaria; 280 in Württemberg; 260 in Baden; and 122 in Alsace-Lorraine. It may be remarked that the beer brewed in Bavaria is generally of darker colour than that produced in other states, and extra strong brews are exported largely into the beer excise district and abroad.

Beer.

Commerce.—The rapid development of German trade dates from the *Zollverein* (customs union), under the special rules and regulations of which it is administered. The Zollverein emanates from a convention originally entered into, in 1828, between Prussia and Hesse, which, subsequently joined by the Bavarian customs-league, by the kingdom of Saxony and the Thuringian states, came into operation, as regards the countries concerned, on the 1st of January 1834. With progressive territorial extensions during the ensuing fifty years, and embracing the grand-duchy of Luxemburg, it had in 1871, when the German empire was founded, an area of about 209,281 sq. m., with a population of 40,678,000. The last important addition was in October 1888, when Hamburg and Bremen were incorporated. Included within it, besides the grand-duchy of Luxemburg, are the Austrian communes of Jungholz and Mittelberg; while, outside, lie the little free-port territories of Hamburg, Cuxhaven, Bremerhaven and Geestemünde, Heligoland, and small portions of the districts of Constance and Waldshut, lying on the Baden Swiss frontier. Down to 1879 Germany was, in general, a free-trade country. In this year, however, a rigid protective system was introduced by the *Zolltarifgesetz*, since modified by the commercial treaties between Germany and Austria-Hungary, Italy, Switzerland and Belgium, of the 1st of February 1892, and by a customs tariff law of the 25th of December 1902. The foreign commercial relations of Germany were again altered by the general and conventional customs tariff, which came into force on the 1st of March 1906. The Zolltarifgesetz of the 15th of July 1879, while restricting the former free import, imposed considerable duties. Exempt from duty were now only refuse, raw products, scientific instruments, ships and literary and artistic objects; forty-four articles—notably beer, vinegar, sugar, herrings, cocoa, salt, fish oils, ether, alum and soda—were unaffected by the change, while duties were henceforth levied upon a large number of articles which had previously been admitted duty free, such as pig iron, machines and locomotives, grain, building timber, tallow, horses, cattle and sheep; and, again, the tariff law further increased the duties leviable upon numerous other articles. Export duties were abolished in 1865 and transit dues in 1861. The law under which Great Britain enjoyed the “most favoured nation treatment” expired on the 31st of December 1905, but its provisions were continued by the *Bundesrat* until further notice. The average value of each article is fixed annually in Germany under the direction of the Imperial Statistical Office, by a commission of experts, who receive information from chambers of commerce and other sources. There are separate valuations for imports and exports. The price fixed is that of the goods at the moment of crossing the frontier. For imports

the price does not include customs duties, cost of transport, insurance, warehousing, &c., incurred after the frontier is passed. For exports, the price includes all charges within the territory, but drawbacks and bounties are not taken into account. The quantities are determined according to obligatory declarations, and, for imports, the fiscal authorities may actually weigh the goods. For packages an official tax is deducted. The countries whence goods are imported and the ultimate destination of exports are registered. The import dues amounted in the year 1906, the first year of the revised tariff, to about £31,639,000, or about 10s. 5d. per head of population.

Statistics relating to the foreign trade of the Empire are necessarily confined to comparatively recent times. The quantities of such imported articles as are liable to duty have, indeed, been known for many years; and in 1872 official tables were compiled showing the value both of imports and of exports. But when the results of these tables proved the importation to be very much greater than the exportation, the conviction arose that the valuation of the exports was erroneous and below the reality. In 1872 the value of the imports was placed at £173,400,000 and that of the exports at £124,700,000. In 1905 the figures were —imports, £371,000,000, and exports, £292,000,000, including precious metals.

Table A following shows the classification of goods adopted before the tariff revision of 1906. From 1907 a new classification has been adopted, and the change thus introduced is so great that it is impossible to make any comparisons between the statistics of years subsequent to and preceding the year 1906. Table B shows imports and exports for 1907 and 1908 according to the new classification adopted.

TABLE A.—*Classes of Imports and Exports, 1905.*

	Import.	Export.
Refuse	£6,866,250	£1,170,200
Cotton and cottons	23,488,750	22,949,600
Lead and by-products	996,300	979,400
Brush and sieve makers' goods	102,400	515,450
Drugs, chemists' and oilmen's colours	15,896,900	23,196,250
Iron and iron goods	3,156,500	33,126,400
Ores, precious metals, asbestos, &c.	28,834,050	9,899,450
Flax and other vegetable spinning materials except cotton	6,794,100	1,235,700
Grain and agricultural produce	59,136,200	7,496,500
Glass	538,050	2,743,900
Hair, feathers, bristles	3,218,600	1,848,150
Skins	18,965,500	9,548,450
Wood and wooden wares	16,940,850	6,056,150
Hops	913,150	2,135,600
Instruments, machines, &c.	4,351,500	17,898,250
Calendars	34,300	74,700
Caoutchouc, &c.	7,379,600	4,616,400
Clothes, body linen, millinery	739,900	7,321,050
Copper and copper goods	8,273,400	10,307,050
Hardware, &c.	2,042,400	12,610,550
Leather and leather goods	3,567,950	9,665,300
Linens	1,750,100	1,904,950
Candles	11,150	42,350
Literary and works of art	3,066,050	9,025,500
Groceries and confectionery	41,446,400	17,585,000
Fats and oils	12,510,600	2,631,600
Paper goods	1,086,800	7,158,800
Furs	265,700	720,200
Petroleum	5,036,600	132,300
Silks and silk goods	9,523,300	8,889,000
Soap and perfumes	151,600	768,200
Playing cards	400	18,950
Stone goods	2,822,000	2,110,550
Coal, lignite, coke and peat	10,136,800	15,096,450
Straw and hemp goods	561,650	262,100
Tar, pitch, resin	2,504,400	834,100
Animals, and animal products	9,926,200	590,700
Earthenware goods	391,650	5,076,350
Cattle	11,366,200	725,100
Oilcloth	43,150	177,300
Wools and woollen textiles	25,290,200	21,562,900
Zinc and zinc goods	682,250	2,413,600
Tin and japanned goods	1,770,550	744,100
Goods insufficiently declared	. .	806,300

Total.	£352,317,250	£284,626,900

TABLE B.—*Classes of Imports and Exports, 1907 and 1908.*

Groups of Articles.	Imports. Value in £1000.		Exports. Value in £1000.	
	1907.	1908.*	1907.	1908.*
Agricultural and forest produce**	215,532	205,512	45,796	50,324
Agricultural produce***	93,253	102,954	10,369	15,168
Colonial produce and substitutes for the same	12,151	12,328	84	108
Southern fruit and fruit peel	3,214	3,262	20	23
Forest produce	28,166	26,299	4,066	3,967
Resins	8,216	8,209	2,500	2,325
Animals and animal products**	63,283	61,794	9,607	9,676
Hides and skins	16,920	17,699	5,383	5,453
Meat, oil, sugar, beverages	21,523	20,404	20,284	20,048
Mineral and fossil raw materials, mineral oils	47,575	45,540	26,166	26,208
Earths and stones	6,541	7,542	3,250	3,006
Ores, slag, cinders	16,465	15,451	1,407	1,206
Mineral fuel	16,895	14,910	19,445	20,020
Mineral oils and other fossil raw materials	7,168	7,209	558	491
Coal-tar, coal-tar oils	506	428	1,506	1,485
Chemical and pharmaceutical products, colours	14,784	14,850	28,116	26,845
Chemical primary materials, acids, salts	9,226	9,550	9,661	9,832
Colours and dyeing materials	951	879	11,630	10,518
Varnish, lacquer	189	158	206	221
Ether, alcohol not included elsewhere, essential oils, perfumery and cosmetics	1,979	1,918	1,118	1,004
Artificial manures	992	1,001	1,303	1,236
Explosives of all kinds	86	74	1,612	1,269
Other chemical and pharmaceutical products	1,361	1,270	2,586	2,765
Animal and vegetable textile materials and wares thereof	98,540	92,105	78,086	70,343
Silk and silk goods	13,533	13,704	13,324	11,364
Wool	33,260	31,195	27,114	24,918
Unworked wool	19,975	19,309	2,647	2,561
Worked wool	4,625	4,961	3,799	3,393
Wares of spun wool	8,660	6,925	20,668	18,964
Cotton	38,543	34,456	29,004	26,201
Unworked cotton	27,705	26,167	3,264	2,987
Worked cotton	980	950	912	891
Cotton wares	9,858	7,338	24,828	22,324
Other vegetable textile materials	10,783	10,411	3,777	3,471
Unworked	7,923	7,819	1,125	1,211
Worked	166	168	122	137
Wares thereof	2,685	2,423	2,531	2,124
Leather and leather wares, furriers' wares	6,695	6,657	16,778	17,835
Leather	2,658	2,804	7,503	8,328
Leather wares	1,332	1,176	4,016	3,867
Furriers' wares	2,698	2,672	5,237	5,616
Caoutchouc wares	694	754	2,328	2,325
Wares of soft caoutchouc	670	735	1,694	1,723
Hardened caoutchouc and wares thereof	24	19	634	602
Wares of animal or vegetable material for carving or moulding	2,448	2,068	4,260	4,131
Wooden wares	859	769	1,707	1,666
Paper, cardboard and wares thereof	1,349	1,205	9,342	9,111
Books, pictures, paintings	1,992	2,036	4,667	4,765
Earthenware	467	377	5,224	4,612
Glass and glassware	747	728	5,671	5,149
Precious metals and wares thereof	13,281	21,243	18,629	6,858
Gold	11,616	19,295	15,898	6,151
Gold	11,184	18,873	11,071	2,897
Gold wares	432	422	4,827	3,254
Silver	1,665	1,948	2,731	2,707
Silver	1,434	1,716	1,206	1,418
Silver wares	231	232	1,525	1,289
Base metals and wares thereof	26,035	26,398	57,146	58,895
Iron and iron wares	5,903	4,472	38,899	40,162
Pig iron (including non-malleable alloys)	1,601	912	966	905
Iron wares	4,302	3,560	37,933	39,257
Aluminium and aluminium wares	546	453	368	273
Raw aluminium	529	433	152	77
Aluminium wares	17	20	216	196

Lead and lead wares	1,438	1,484	945	985
Raw lead (including waste)	1,427	1,470	525	568
Lead wares	11	14	420	417
Zinc and zinc wares	727	847	2,433	2,489
Raw zinc (including waste)	706	825	1,631	1,784
Zinc wares	21	22	802	705
Tin and tin wares	2,405	2,629	1,380	1,236
Raw tin (including waste)	2,357	2,581	787	688
Tin wares	48	48	593	548
Nickel and nickel wares	400	540	246	298
Raw nickel	375	527	160	233
Nickel wares	25	13	86	65
Copper and copper wares	13,803	15,088	7,998	8,470
Raw copper (including copper coin, brass, tombac, &c.)	12,995	14,192	2,204	2,014
Copper wares	808	896	5,794	6,456
Instruments of precision	813	885	4,877	4,982
Machinery, vehicles	7,093	5,489	33,117	34,653
Machinery	4,090	3,451	19,041	20,684
Electro-technical products	411	451	8,227	9,107
Vehicles and vessels	2,562	1,587	5,849	4,862
Firearms, clocks, musical instruments, toys	1,732	1,424	8,704	7,505
Clocks and watches	1,382	1,134	1,296	1,210
Musical instruments	223	170	3,176	2,780
Toys	39	35	3,949	3,273
Total	442,663	429,636	349,114	336,347

* Provisional figures only.

** Excluding vegetable and animal textile materials.

*** Excluding vegetable textile materials.

The following table shows the commercial intercourse in imports and exports, exclusive of bullion and coin, between Germany and the chief countries of the world in 1905, 1906 and 1907.

Imports.

Country.	1905.		1906.		1907.	
	Value in £1000.	Percentage of Germany's Total Imports.	Value in £1000.	Percentage of Germany's Total Imports.	Value in £1000.	Percentage of Germany's Total Imports.
Belgium	13,439	3.8	14,315	3.6	14,586	3.4
Denmark	5,986	1.7	6,302	1.6	6,050	1.4
France	19,772	5.6	21,306	5.4	22,302	5.2
United Kingdom	35,320	10.1	40,531	10.3	48,014	11.2
Italy	10,350	3	11,851	3	14,030	3.3
Netherlands	12,077	3	11,864	3	11,187	2.6
Austria-Hungary	36,974	10.6	39,814	10.1	39,939	9.3
Rumania	4,568	1.3	5,774	1.5	7,365	1.7
Russia	47,816	13.6	52,528	13.4	54,447	12.7
Sweden	5,887	1.7	7,359	1.9	8,457	2
Switzerland	8,980	2.6	10,659	2.9	10,366	2.4
Spain	5,742	1.6	7,410	1.9	6,878	1.6
British South Africa	1,769	0.5	1,766	0.4	2,258	0.5
Dominion of Canada	481	0.1	463	0.1	483	0.1
New Zealand	75	..	87	..	94	..
British West Africa	2,562	0.7	2,731	0.7	3,601	0.8
British India	13,657	3.9	15,842	4	20,016	4.7
Dutch Indies	5,848	1.7	7,002	1.8	9,199	2.1
Argentine Republic	18,150	5.2	18,302	4.7	21,756	5.1
Brazil	8,454	2.4	9,246	2.4	9,636	2.2
Chile	6,536	1.9	7,131	1.8	7,074	1.6
United States	48,770	13.9	60,787	15.4	64,864	15.1
Commonwealth of Australia	7,690	2.2	8,619	2.2	11,209	2.6

Exports.

Country.	1905.		1906.		1907.	
	Value in £1000.	Percentage of Germany's Total Exports.	Value in £1000.	Percentage of Germany's Total Exports.	Value in £1000.	Percentage of Germany's Total Exports.
Belgium	15,364	5.5	17,509	5.6	16,861	5
Denmark	8,668	3.1	9,699	3.1	10,182	3
France	14,420	5.1	18,815	6	22,080	6.6
United Kingdom	51,253	18.2	52,473	16.8	52,135	15.5
Italy	8,045	2.9	11,354	3.6	14,893	4.4
Netherlands	21,295	7.6	21,799	7	22,232	6.6
Norway	3,447	1.2	3,573	1.2	4,211	1.3
Austria-Hungary	28,526	10.1	31,926	10.2	35,231	10.5
Rumania	2,144	0.8	3,140	1	3,372	1
Russia	17,027	6	19,962	6.4	21,531	6.4
Sweden	7,653	2.7	8,675	2.8	9,177	2.7
Switzerland	17,649	6.3	18,367	5.9	21,948	6.5
Spain	2,609	0.9	2,838	0.9	3,228	1
British South Africa	1,687	0.6	1,607	0.5	1,422	0.4
Dominion of Canada	1,071	0.4	1,203	0.4	1,456	0.4
New Zealand	227	0.1	244	0.1	263	0.1
Turkey	3,484	1.3	3,357	1.1	4,011	1.2
British India	4,226	1.5	5,011	1.6	4,868	1.4
China	3,727	1.3	3,331	1.1	3,105	0.9
Japan	4,158	1.5	4,328	1.4	5,036	1.5
Argentine Republic	6,463	2.3	8,367	2.7	8,810	2.6
Brazil	3,525	1.3	4,364	1.4	5,118	1.5
United States	26,660	9.5	31,281	10	32,070	9.5
Commonwealth of Australia	2,264	0.8	2,863	0.9	3,004	0.9

The commerce of Germany shows an upward tendency, which progresses *pari passu* with its greatly increased production. The export of ships from the United Kingdom to the empire decreased during two years, 1903 (£305,682) and 1904 (£365,062), almost to a vanishing point, German yards being able to cope with the demands made upon them for the supply of vessels of all classes, including mercantile vessels and ships of war. In 1905 and subsequent years, however, the degree of employment in German yards increased to such an extent, principally owing to the placing of the Admiralty contracts with private builders, that the more urgent orders for mercantile vessels were placed abroad.

The following tables give the value of trade between the United Kingdom and Germany in 1900 and 1905:—

Staple Imports into the United Kingdom from Germany.	1900.	1905.
	£	£
Sugar	9,164,573	10,488,085
Glass and manufactures	1,078,648	1,108,117
Eggs	1,017,119	764,966
Cottons and yarn	992,244	1,476,385
Woollens and yarn	1,312,671	1,984,475
Iron and steel and manufactures	1,012,376	379,479
Machinery	411,178	735,536
Paper	523,544	528,946
Musical instruments	660,777	676,391
Toys	644,690	714,628
Zinc and manufactures	461,023	673,602
Wood and manufactures	1,470,839	1,109,584
Chemicals	513,200	735,830

Principal Articles exported by Great Britain to Germany.	1900.	1905.
	£	£
Cottons and yarn	3,843,917	4,941,917
Woollens and yarn	3,743,842	3,795,591
Alpaca, &c., yarn	1,022,259	1,325,519
Wool	742,632	1,691,035
Ironwork	2,937,055	1,500,414
Herrings	1,651,441	2,042,483

Machinery	2,040,797	2,102,835
Coals, cinders	4,267,172	3,406,535
New ships	1,592,865	1,377,081

Navigation.—The seamen of Frisia are among the best in the world, and the shipping of Bremen and Hamburg had won a respected name long before a German mercantile marine, properly so called, was heard of. Many Hamburg vessels sailed under charter of English and other houses in foreign, especially Chinese, waters. Since 1868 all German ships have carried a common flag—black, white, red; but formerly Oldenburg, Hanover, Bremen, Hamburg, Lübeck, Mecklenburg and Prussia had each its own flag, and Schleswig-Holstein vessels sailed under the Danish flag. The German mercantile fleet occupies, in respect of the number of vessels, the fourth place—after Great Britain, the United States of America and Norway; but in respect of tonnage it stands third—after Great Britain and the United States only.

The following table shows its distribution on the 1st of January of the two years 1905 and 1908:—

	Baltic Ports.		North Sea Ports.		Total Shipping.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
1905—						
Sailing vessels	386	19,067	2181	559,436	2567	578,503
Steamers	486	236,509	1171	1,537,563	1657	1,774,072
Totals	872	255,576	3352	2,096,999	4224	2,352,575
1908—						
Sailing vessels	394	17,472	2255	516,180	2649	533,652
Steamers	521	274,952	140l	1,981,831	1922	2,256,783
Totals	915	292,424	3656	2,498,011	4571	2,790,435

In 1905, 2136 vessels of 283,171 tons, and in 1908, 2218 vessels of 284,081 tons, belonged to Prussian ports, and the number of sailors of the mercantile marine was 60,616 in 1905 and 71,853 in 1908.

The chief ports are Hamburg, Stettin, Bremen, Kiel, Lübeck, Flensburg, Bremerhaven, Danzig (Neufahrwasser), Geestemünde and Emden; and the number and tonnage of vessels of foreign nationality entering and clearing the ports of the empire, as compared with national shipping, were in 1906:—

Foreign Ships.	Number entered in Cargo.	Tonnage.	Number cleared in Cargo.	Tonnage.
Danish	5917	1,589,346	5059	1,219,388
British	5327	5,129,017	3211	2,552,268
Swedish	4891	1,164,431	3317	747,656
Dutch	2181	458,401	1973	316,562
Norwegian	1565	817,483	720	347,811
Russian	720	250,564	439	143,983

The ports of Hamburg and Bremen, which are the chief outlets for emigration to the United States of America, carry on a vast commercial trade with all the chief countries of the world, and are the main gates of maritime intercourse between the United Kingdom and Germany.

The inland navigation is served by nearly 25,000 river, canal and coasting vessels, of a tonnage of about 4,000,000.

Railways.—The period of railway construction was inaugurated in Germany by the opening of the line (4 m. in length) from Nuremberg to Fürth in 1835, followed by the main line (71 m.) between Leipzig and Dresden, opened throughout in 1839. The development of the railway system was slow and was not conceived on any uniform plan. The want of a central government operated injuriously, for it often happened that intricate negotiations and solemn treaties between several sovereign states were required before a line could be constructed; and, moreover, the course it was to take was often determined less by the general exigencies of commerce than by many trifling interests or desires of neighbouring states. The state which was most self-seeking in its railway politics was Hanover, which separated the eastern and western parts of the kingdom of Prussia. The difficulties arising to Prussia from this source were experienced in a still greater degree by the seaports of Bremen and Hamburg, which were severely hampered by the particularism displayed by Hanover.

The making of railways was from the outset regarded by some German states as exclusively a

function of the government. The South German states, for example, have only possessed state railways. In Prussia numerous private companies, in the first instance, constructed their systems, and the state contented itself for the most part with laying lines in such districts only as were not likely to attract private capital.

The development of the German railway system falls conveniently into four periods. The first, down in 1840, embraces the beginnings of railway enterprise. The next, down to 1848, shows the linking-up of various existing lines and the establishment of inter-connexion between the chief towns. The third, down to 1881, shows the gradual establishment of state control in Prussia, and the formation of direct trunk lines. The fourth begins from 1881 with the purchase of practically all the railways in Prussia by the government, and the introduction of a uniform system of interworking between the various state systems. The purchase of the railways by the Prussian government was on the whole equably carried out, but there were several hard cases in the expropriation of some of the smaller private lines.

The majority of the German railways are now owned by the state governments. Out of 34,470 m. of railway completed and open for traffic in 1906, only 2579 m. were the property of private undertakings, and of these about 150 were worked by the state. The bulk of the railways are of the normal 4 ft. 8½ in. gauge. Narrow-gauge (2½ ft.) lines—or light railways—extended over 1218 m. in 1903, and of these 537 m. were worked by the state.

The board responsible for the imperial control over the whole railway system in Germany is the *Reichseisenbahnamt* in Berlin, the administration of the various state systems residing, in Prussia, in the ministry of public works; in Bavaria in the ministry of the royal house and of the exterior; in Württemberg in the ministry of the exterior; in Saxony in the ministry of the interior; in Baden and Hesse-Darmstadt in commissions of the ministry of finance; and in Alsace-Lorraine in the imperial ministry of railways. 816

The management of the Prussian railway system is committed to the charge of twenty “directions,” into which the whole network of lines is divided, being those of Altona, Berlin, Breslau, Bromberg, Danzig, Elberfeld, Erfurt, Essen a.d. Ruhr, Frankfort-on-Main, Halle a.d. Saale, Hanover, Cassel, Kattowitz, Cologne, Königsberg, Magdeburg, Münster, Posen, Saarbrücken and Stettin. The entire length of the system was in 1906 20,835 m., giving an average of about 950 m. to each “direction.” The smallest mileage controlled by a “direction” is Berlin, with 380 m., and the greatest, Königsberg, with 1200 m.

The Bavarian system embraces 4642 m., and is controlled and managed, apart from the “general direction” in Munich, by ten traffic boards, in Augsburg, Bamberg, Ingolstadt, Kempten, Munich, Nuremberg, Regensburg, Rosenheim, Weiden and Würzburg.

The system of the kingdom of Saxony has a length of 1616 m., and is controlled by the general direction in Dresden.

The length of the Württemberg system is 1141 m., and is managed by a general direction in Stuttgart.

Baden (state) controls 1233, Oldenburg (state) 382, Mecklenburg-Schwerin 726 and Saxe-Weimar 257 m. respectively. Railways lying within the other smaller states are mostly worked by Prussia.

Alsace-Lorraine has a separate system of 1085 m., which is worked by the imperial general direction in Strassburg.

By the linking-up of the various state systems several grand trunk line routes have been developed—notably the lines Berlin-Vienna-Budapest; Berlin-Cologne-Brussels and Paris; Berlin-Halle-Frankfort-on-Main-Basel; Hamburg-Cassel-Munich and Verona; and Breslau-Dresden-Bamberg-Geneva. Until 1907 no uniform system of passenger rates had been adopted, each state retaining its own fares—a condition that led to much confusion. From the 1st of May 1907 the following tariff came into force. For ordinary trains the rate for first class was fixed at 1¼d. a mile; for second class at .7d.; for third class at ½d., and for fourth class at ¼d. a mile. For express trains an extra charge is made of 2s. for distances exceeding 93 m. (150 kils.) in the two superior classes, and 1s. for a lesser distance, and of 1s. and 6d. respectively in the case of third class tickets. Fourth class passengers are not conveyed by express trains. The above rates include government duty; but the privilege of free luggage (as up to 56 lb) has been withdrawn, and all luggage other than hand baggage taken into the carriages is charged for. In 1903 371,084,000 metric tons of goods, including animals, were conveyed by the German railways, yielding £68,085,000 sterling, and the number of passengers carried was 957,684,000, yielding £29,300,000.

The passenger ports of Germany affording oversea communications to distant lands are mainly those of Bremen (Bremerhaven) and Hamburg (Cuxhaven) both of which are situate on the North Sea. From them great steamship lines, notably the North German Lloyd, the Hamburg-American, the Hamburg South American and the German East African steamship

companies, maintain express mail and other services with North and South America, Australia, the Cape of Good Hope and the Far East. London and other English ports, French, Italian and Levant coast towns are also served by passenger steamboat sailings from the two great North Sea ports. The Baltic ports, such as Lübeck, Stettin, Danzig (Neufahrwasser) and Königsberg, principally provide communication with the coast towns of the adjacent countries, Russia and Sweden.

Waterways.—In Germany the waterways are almost solely in the possession of the state. Of ship canals the chief is the Kaiser Wilhelm canal (1887-1895), 61 m. long, connecting the North Sea and the Baltic; it was made with a breadth at bottom of 72 ft. and at the surface of 213 ft., and with a depth of 29 ft. 6 in., but in 1908 work was begun for doubling the bottom width and increasing the depth to 36 ft. In respect of internal navigation, the principal of the greater undertakings are the Dortmund-Ems and the Elbe-Trave canals. The former, constructed in 1892-1899, has a length of 150 m. and a mean depth of 8 ft. The latter, constructed 1895-1900, has a length of 43 m. and a mean depth of about 7½ ft. A project was sanctioned in 1905 for a canal, adapted for vessels up to 600 tons, from the Rhine to the Weser at Hanover, utilizing a portion of the Dortmund-Ems canal; for a channel accommodating vessels of similar size between Berlin and Stettin; for improving the waterway between the Oder and the Vistula, so as to render it capable of accommodating vessels of 400 tons; and for the canalization of the upper Oder.

On the whole, Germany cannot be said to be rich in canals. In South Germany the Ludwigs canal was, until the annexation of Alsace-Lorraine, the only one of importance. It was constructed by King Louis I. of Bavaria in order to unite the German Ocean and the Black Sea, and extends from the Main at Bamberg to Kelheim on the Danube. Alsace-Lorraine had canals for connecting the Rhine with the Rhone and the Marne, a branch serving the collieries of the Saar valley. The North German plain has, in the east, a canal by which Russian grain is conveyed to Königsberg, joining the Pregel to the Memel, and the upper Silesian coalfield is in communication with the Oder by means of the Klodnitz canal. The greatest number of canals is found around Berlin; they serve to join the Spree to the Oder and Elbe, and include the Teltow canal opened in 1906. The canals in Germany (including ship canals through lakes) have a total length of about 2600 m. Navigable and canalized rivers, to which belong the great water-systems of the Rhine, Elbe and Oder, have a total length of about 6000 m.

Roads.—The construction of good highways has been well attended to in Germany only since the Napoleonic wars. The separation of the empire into small states was favourable to road-making, inasmuch as it was principally the smaller governments that expended large sums for their network of roads. Hanover and Thuringia have long been distinguished for the excellence of their roads, but some districts suffer even still from the want of good highways. The introduction of railways for a time diverted attention from road-making, but this neglect has of late been to some extent remedied. In Prussia the districts (*Kreise*) have undertaken the charge of the construction of the roads; but they receive a subsidy from the public funds of the several provinces. Turnpikes were abolished in Prussia in 1874 and in Saxony in 1885. The total length of the public roads is estimated at 80,000 m.

Posts and Telegraphs.—With the exception of Bavaria and Württemberg, which have administrations of their own, all the German states belong to the imperial postal district (*Reichspostgebiet*). Since 1874 the postal and telegraphic departments have been combined. Both branches of administration have undergone a surprising development, especially since the reduction of the postal rates. Germany, including Bavaria and Württemberg, constitutes with Austria-Hungary a special postal union (Deutsch-Österreichischer Postverband), besides forming part of the international postal union. There are no statistics of posts and telegraphs before 1867, for it was only when the North German union was formed that the lesser states resigned their right of carrying mails in favour of the central authority. Formerly the prince of Thurn-and-Taxis was postmaster-general of Germany, but only some of the central states belonged to his postal territory. The seat of management was Frankfort-on-Main.

The following table shows the growth in the number of post offices for the whole empire:—

Year.	Post Offices.	Men employed.
1872	7,518	. .
1880	9,460	. .
1890	24,952	128,687
1899	36,388	206,945
1904	38,658	261,985
1907	40,083	319,026

In 1872 there were 2359 telegraph offices; in 1880, 9980; in 1890, 17,200; and in 1907, 37,309. There were 188 places provided with telephone service in 1888, and 13,175 in 1899.

The postal receipts amounted for the whole empire in 1907 to £33,789,460, and the expenditure to £31,096,944, thus showing a surplus of £2,692,516.

Constitution.—The constitution of the German empire is, in all essentials, that of the North German Confederation, which came into force on the 7th of June 1867. Under this the presidency (*Praesidium*) of the confederation was vested in the king of Prussia and his heirs. As a result of the Franco-German war of 1870 the South German states joined the confederation; on the 9th of December 1870 the diet of the confederation accepted the treaties and gave to the new confederation the name of German Empire (*Deutsche Reich*), and on the 18th of January 1871 the king of Prussia was proclaimed German emperor (*Deutscher Kaiser*) at Versailles. This was a change of style, not of functions and powers. The title is "German emperor," not "emperor of Germany," being intended to show that the Kaiser is but *primus inter pares* in a confederation of territorial sovereigns; his authority as territorial sovereign (*Landesherr*) extends over Prussia, not over Germany.

The imperial dignity is hereditary in the line of Hohenzollern, and follows the law of primogeniture. The emperor exercises the imperial power in the name of the confederated states. In his office he is assisted by a federal council (*Bundesrat*), which represents the governments of the individual states of Germany. The members of this council, 58 in number, are appointed for each session by the governments of the individual states. The legislative functions of the empire are vested in the emperor, the Bundesrat, and the Reichstag or imperial Diet. The members of the latter, 397 in number, are elected for a space of five years by universal suffrage. Vote is by ballot, and one member is elected by (approximately) every 150,000 inhabitants.

As regards its legislative functions, the empire has supreme and independent control in matters relating to military affairs and the navy, to the imperial finances, to German commerce, to posts and telegraphs, and also to railways, in so far as these affect the common defence of the country. Bavaria and Württemberg, however, have preserved their own postal and telegraphic administration. The legislative power of the empire also takes precedence of that of the separate states in the regulation of matters affecting freedom of migration (*Freizügigkeit*), domicile, settlement and the rights of German subjects generally, as well as in all that relates to banking, patents, protection of intellectual property, navigation of rivers and canals, civil and criminal legislation, judicial procedure, sanitary police, and control of the press and of associations.

The executive power is in the emperor's hands. He represents the empire internationally, and can declare war if defensive, and make peace as well as enter into treaties with other nations; he also appoints and receives ambassadors. For declaring offensive war the consent of the federal council must be obtained. The separate states have the privilege of sending ambassadors to the other courts; but all consuls abroad are officials of the empire and are named by the emperor.

Both the Bundesrat and the Reichstag meet in annual sessions convoked by the emperor who has the right of proroguing and dissolving the Diet; but the prorogation must not exceed 60 days, and in case of dissolution new elections must be ordered within 60 days, and the new session opened within 90 days. All laws for the regulation of the empire must, in order to pass, receive the votes of an absolute majority of the federal council and the Reichstag.

Alsace-Lorraine is represented in the Bundesrat by four commissioners (*Kommissäre*), without votes, who are nominated by the Statthalter (imperial lieutenant).

The fifty-eight members of the Bundesrat are nominated by the governments of the individual states for each session; while the members of the Reichstag are elected by universal suffrage and ballot for the term of five years. Every German who has completed his twenty-fifth year is prima facie entitled to the suffrage in the state within which he has resided for one year. Soldiers and those in the navy are not thus entitled, so long as they are serving under the colours. Excluded, further, are persons under tutelage, bankrupts and paupers, as also such persons who have been deprived of civil rights, during the time of such deprivation. Every German citizen who has completed his twenty-fifth year and has resided for a year in one of the federal states is eligible for election in any part of the empire, provided he has not been, as in the cases above, excluded from the right of suffrage. The secrecy of the ballot is ensured by special regulations passed on the 28th of April 1903. The voting-paper, furnished with an official stamp, must be placed in an envelope by the elector in a compartment set apart for the purpose in the polling room, and, thus enclosed, be handed by him to the presiding officer. An absolute majority of votes decides the election. If (as in the case of several candidates) an absolute majority over all the others has not been declared, a test election (*Stichwahl*) takes place between the two candidates who have received the greatest number of votes. In case of an equal number of votes being cast for both candidates, the decision is by lot.

The subjoined table gives the names of the various states composing the empire and the

number of votes which the separate states have in the federal council. Each state may appoint as many members to the federal council as it has votes. The table also gives the number of the deputies in the Reichstag.

States of the Empire.	No. of Members in Bundesrat.	No. of Members in Reichstag.
Kingdom of Prussia	17	236
Kingdom of Bavaria	6	48
Kingdom of Saxony	4	23
Kingdom of Württemberg	4	17
Grand duchy of Baden	3	14
Grand duchy of Hesse	3	9
Grand duchy of Mecklenburg-Schwerin	2	6
Grand duchy of Saxe-Weimar	1	3
Grand duchy of Mecklenburg-Strelitz	1	1
Grand duchy of Oldenburg	1	3
Duchy of Brunswick	2	3
Duchy of Saxe-Meiningen	1	2
Duchy of Saxe-Altenburg	1	1
Duchy of Saxe-Coburg-Gotha	1	2
Duchy of Anhalt	1	2
Principality of Schwarzburg-Sondershausen	1	1
Principality of Schwarzburg-Rudolstadt	1	1
Principality of Waldeck	1	1
Principality of Reuss-Greiz	1	1
Principality of Reuss-Schleiz	1	1
Principality of Schaumburg-Lippe	1	1
Principality of Lippe	1	1
Free town of Lübeck	1	1
Free town of Bremen	1	1
Free town of Hamburg	1	3
Imperial territory of Alsace-Lorraine	. .	15
Total	58	397

The Reichstag must meet at least once in each year. Since November 1906 its members have been paid (see PAYMENT OF MEMBERS).

The following table shows its composition after the elections of 1903 and 1907:—

Parties.	1903.	1907.
Centre	100	108
Social Democrats	81	43
Conservatives	51	60
National Liberals	49	57
Freisinnige Volkspartei	27	33
Reichspartei	19	22
Alsatians, Guelphs and Danes	18	5
Poles	16	20
Wirtschaftliche Vereinigung (Reform Partei)	12	21
Freisinnige Vereinigung	9	16
Wilde (no party)	9	5
Bund der Landwirte	3	6
Bauernbund	3	1

All the German states have separate representative assemblies, except Alsace-Lorraine and the two grand-duchies of Mecklenburg. The six larger states have adopted the two-chamber system, but in the composition of the houses great differences are found. The lesser states also have chambers of representatives numbering from 12 members (in Reuss-Greiz) to 48 members (in Brunswick), and in most states the different classes, as well as the cities and the rural districts, are separately represented. The free towns have legislative assemblies, numbering from 120 to 200 members.

Imperial measures, after passing the Bundesrat and the Reichstag, must obtain the sanction of the emperor in order to become law, and must be countersigned, when promulgated, by the chancellor of the empire (*Reichskanzler*). All members of the federal council are entitled to be present at the deliberations of the Reichstag. The Bundesrat, acting under the direction of the chancellor of the empire, is also a supreme administrative and consultative board, and as such

it has nine standing committees, viz.: for army and fortresses; for naval purposes; for tariffs, excise and taxes; for trade and commerce; for railways, posts and telegraphs; for civil and criminal law; for financial accounts; for foreign affairs; and for Alsace-Lorraine. Each committee includes representatives of at least four states of the empire.

For the several branches of administration a considerable number of imperial offices have been gradually created. All of them, however, either are under the immediate authority of the chancellor of the empire, or are separately managed under his responsibility. The most important are the chancery office, the foreign office and the general post and telegraph office. But the heads of these do not form a cabinet. 818

The Chancellor of the Empire (*Reichskanzler*).—The Prussian plenipotentiary to the Bundesrat is the president of that assembly; he is appointed by the emperor, and bears the title Reichskanzler. This head official can be represented by any other member of the Bundesrat named in a document of substitution. The Reichskanzler is the sole responsible official, and conducts all the affairs of the empire, with the exception of such as are of a purely military character, and is the intermediary between the emperor, the Bundesrat and the Reichstag. All imperial rescripts require the counter-signature of the chancellor before attaining validity. All measures passed by the Reichstag require the sanction of the majority of the Bundesrat, and only become binding on being proclaimed on behalf of the empire by the chancellor, which publication takes place through the *Reichsgesetzblatt* (the official organ of the chancellor).

Government Offices.—The following imperial offices are directly responsible to the chancellor and stand under his control:—

1. The foreign office, which is divided into three departments: (i.) the political and diplomatic; (ii.) the political and commercial; (iii.) the legal. The chief of the foreign office is a secretary of state, taking his instructions immediately from the chancellor.

2. The colonial office (under the direction of a secretary of state) is divided into (i.) a civil department; (ii.) a military department; (iii.) a disciplinary court.

3. The ministry of the interior or home office (under the conduct of a secretary of state). This office is divided into four departments, dealing with (i.) the business of the Bundesrat, the Reichstag, the elections, citizenship, passports, the press, and military and naval matters, so far as the last concern the civil authorities; (ii.) purely social matters, such as old age pensions, accident insurance, migration, settlement, poor law administration, &c.; (iii.) sanitary matters, patents, canals, steamship lines, weights and measures; and (iv.) commercial and economic relations—such as agriculture, industry, commercial treaties and statistics.

4. The imperial admiralty (*Reichsmarineamt*), which is the chief board for the administration of the imperial navy, its maintenance and development.

5. The imperial ministry of justice (*Reichsjustizamt*), presided over by a secretary of state. This office, not to be confused with the *Reichsgericht* (supreme legal tribunal of the empire) in Leipzig, deals principally with the drafting of legal measures to be submitted to the Reichstag.

6. The imperial treasury (*Reichsschatzamt*), or exchequer, is the head financial office of the empire. Presided over by a secretary of state, its functions are principally those appertaining to the control of the national debt and its administration, together with such as in the United Kingdom are delegated to the board of inland revenue.

7. The imperial railway board (*Reichseisenbahnamt*), the chief official of which has the title of “president,” deals exclusively with the management of the railways throughout the empire, in so far as they fall under the control of the imperial authorities in respect of laws passed for their harmonious interworking, their tariffs and the safety of passengers conveyed.

8. The imperial post office (*Reichspostamt*), under a secretary of state, controls the post and telegraph administration of the empire (with the exception of Bavaria and Württemberg), as also those in the colonies and dependencies.

9. The imperial office for the administration of the imperial railways in Alsace-Lorraine, the chief of which is the Prussian minister of public works.

10. The office of the accountant-general of the empire (*Rechnungshof*), which controls and supervises the expenditure of the sums voted by the legislative bodies, and revises the accounts of the imperial bank (*Reichsbank*).

11. The administration of the imperial invalid fund, *i.e.* of the fund set apart in 1871 for the benefit of soldiers invalided in the war of 1870-71; and

12. The imperial bank (*Reichsbank*), supervised by a committee of four under the presidency of the imperial chancellor, who is a fifth and permanent member of such committee.

The heads of the various departments of state do not form, as in England, the nucleus of a cabinet. In so far as they are secretaries of state, they are directly responsible to the

chancellor, who represents all the offices in his person, and, as has been said, is the medium of communication between the emperor and the Bundesrat and Reichstag.

Colonies.—The following table gives some particulars of the dependencies of the empire:—

Name.	Date of Acquisition.	Area (estimated) sq. m.	Pop. (estimated).
In Africa—			
Togoland	1884	33,700	1,000,000
Cameroon	1884	190,000	3,500,000
S.W. Africa	1884	322,450	200,000
East Africa	1885	364,000	7,000,000
Total in Africa		910,150	11,700,000
In the Pacific—			
German New Guinea	1884	70,000	110,000(?)
Bismarck Archipelago	1884	20,000	188,000
Caroline, Pelew and Mariana Islands	1899	800	41,600
Solomon Islands	1886	4,200	45,000
Marshall Islands	1885	160	15,000
Samoan Islands	1899	985	33,000
Total in Pacific		96,145	432,600
In Asia—			
Kiao-chow	1897	117	60,000
Total dependencies	1884-1899	1,006,412	12,192,600

Except Kiao-chow, which is controlled by the admiralty, the dependencies of the empire are under the direction of the colonial office. This office, created in 1907, replaced the colonial department of the foreign office which previously had had charge of colonial affairs. The value of the trade of the colonies with Germany in 1906 was: imports into Germany, £1,028,000; exports from Germany, £2,236,000. For 1907 the total revenue from the colonies was £849,000; the expenditure of the empire on the colonies in the same year being £4,362,000. (See the articles on the various colonies.)

Local Government.—In the details of its organization local self-government differs considerably in the various states of the German empire. The general principle on which it is based, however, is that which has received its most complete expression in the Prussian system: government by experts, checked by lay criticism and the power of the purse, and effective control by the central authorities. In Prussia at least the medieval system of local self-government had succumbed completely to the centralizing policy of the monarchy, and when it was revived it was at the will and for the purposes of the central authorities, as subsidiary to the bureaucratic system. This fact determined its general characteristics. In England the powers of the local authorities are defined by act of parliament, and within the limits of these powers they have a free hand. In Germany general powers are granted by law, subject to the approval of the central authorities, with the result that it is the government departments that determine what the local elected authorities may do, and that the latter regard themselves as commissioned to carry out, not so much the will of the locality by which they are elected, as that of the central government. This attitude is, indeed, inevitable from the double relation in which they stand. A *Bürgermeister*, once elected, becomes a member of the bureaucracy and is responsible to the central administration; even the headman of a village commune is, within the narrow limits of his functions, a government official. Moreover, under the careful classification of affairs into local and central, many things which in England are regarded as local (*e.g.* education, sanitary administration, police) are regarded as falling under the sphere of the central government, which either administers them directly or by means of territorial delegations consisting either of individuals or of groups of individuals. These may be purely official (*e.g.* the Prussian *Regierung*), a mixture of officials and of elected non-official members approved by the government (*e.g.* the *Bezirksausschuss*), or may consist wholly of authorities elected for another purpose, but made to act as the agents of the central departments (*e.g.* the *Kreisausschuss*). That this system works without friction is due to the German habit of discipline; that it is, on the whole, singularly effective is a result of the peculiarly enlightened and progressive views of the German bureaucracy.[3]

The unit of the German system of local government is the commune (*Gemeinde*, or more strictly *Ortsgemeinde*). These are divided into rural communes (*Landgemeinden*) and urban communes (*Stadtgemeinden*), the powers and functions of which, though differing widely, are based upon the same general principle of representative local self-government. The higher organs of local government, so far as these are representative, are based on the principle of a group or union of communes (*Gemeindeverband*). Thus, in Prussia, the representative

assembly of the Circle (*Kreistag*) is composed of delegates of the rural communes, as well as of the large landowners and the towns, while the members of the provincial diet (*Provinziallandtag*) are chosen by the *Kreistage* and by such towns as form separate *Kreise*.

In Prussia the classes of administrative areas are as follows: (1) the province, (2) the government district (*Regierungsbezirk*), (3) the rural circle (*Landkreis*) and urban circle (*Stadtkreis*), (4) the official district (*Amtsbezirk*), (5) the town commune (*Stadtgemeinde*) and rural commune (*Landgemeinde*). Of these areas the provinces, circles and communes are for the purposes both of the central administration and of local self-government, and the bodies by which they are governed are corporations. The *Regierungsbezirke* and *Amtsbezirke*, on the other hand, are for the purposes of the central administration only and are not incorporated. The Prussian system is explained in greater detail in the article Prussia (*q.v.*). Here it must suffice to indicate briefly the general features of local government in the other German states, as compared with that in Prussia. The province, which usually covers the area of a formerly independent state (*e.g.* Hanover) is peculiar to Prussia. The *Regierungsbezirk*, however, is common to the larger states under various names, *Regierungsbezirk* in Bavaria, *Kreishauptmannschaft* in Saxony, *Kreis* in Württemberg. Common to all is the president (*Regierungspräsident*, *Kreishauptmann* in Saxony), an official who, with a committee of advisers, is responsible for the oversight of the administration of the circles and communes within his jurisdiction. Whereas in Prussia, however, the *Regierung* is purely official, with no representative element, the *Regierungsbezirk* in Bavaria has a representative body, the *Landrat*, consisting of delegates of the district assemblies, the towns, large landowners, clergy and—in certain cases—the universities; the president is assisted by a committee (*Landratsausschuss*) of six members elected by the *Landrat*. In Saxony the *Kreishauptmann* is assisted by a committee (*Kreisausschuss*).

Below the *Regierungsbezirk* is the *Kreis*, or Circle, in Prussia, Baden and Hesse, which corresponds to the *Distrikt* in Bavaria, the *Oberamt* in Württemberg[4] and the *Amtshauptmannschaft* in Saxony. The representative assembly of the Circle (*Kreistag*, *Distriktsrat* in Bavaria, *Amtsversammlung* in Württemberg, *Bezirksversammlung* in Saxony) is elected by the communes, and is presided over by an official, either elected or, as in the case of the Prussian *Landrat*, nominated from a list submitted by the assembly. So far as their administrative and legislative functions are concerned the German *Kreistage* have been compared to the English county councils or the Hungarian *comitatus*. Their decisions, however, are subject to the approval of their official chiefs. To assist the executive a small committee (*Kreisausschuss*, *Distriktsausschuss*, &c.) is elected subject to official approval. The official district (*Amtsbezirk*), a subdivision of the circle for certain administrative purposes (notably police), is peculiar to Prussia.

Rural Communes.—As stated above, the lowest administrative area is the commune, whether urban or rural. The laws as to the constitution and powers of the rural communes vary much in the different states. In general the commune is a body corporate, its assembly consisting either (in small villages) of the whole body of the qualified inhabitants (*Gemeindeversammlung*), or of a representative assembly (*Gemeindevertretung*) elected by them (in communes where there are more than forty qualified inhabitants). At its head is an elected headman (*Schulze*, *Dorfvorsteher*, &c.), with a small body of assistants (*Schöffen*, &c.). He is a government official responsible, *inter alia*, for the policing of the commune. Where there are large estates these sometimes constitute communes of themselves. For common purposes several communes may combine, such combinations being termed in Württemberg *Bürgermeistereien*, in the Rhine province *Amtsverbände*. In general the communes are of slight importance. Where the land is held by small peasant proprietors, they display a certain activity; where there are large ground landlords, these usually control them absolutely.

Towns.—The constitution of the towns (*Städteverfassung*) varies more greatly in the several states than that of the rural communes. According to the so-called *Stein'sche Städteverfassung* (the system introduced in Prussia by Stein in 1808), which, to differentiate between it and other systems, is called the *Magistratsverfassung* (or magisterial constitution), the municipal communes enjoy a greater degree of self-government than do the rural. In the magisterial constitution of larger towns and cities, the members of the *Magistrat*, *i.e.* the executive council (also called *Stadtrat*, *Gemeinderat*), are elected by the representative assembly of the citizens (*Stadtverordnetenversammlung*) out of their own body.

In those parts of Germany which come under the influence of French legislation, the constitution of the towns and that of the rural communes (the so-called *Bürgermeistereiverfassung*) is identical, in that the members of the communal executive body are, in the same way as those of the communal assembly, elected to office immediately by the whole body of municipal electors.

The government of the towns is regulated in the main by municipal codes (*Städteordnungen*), largely based upon Stein's reform of 1808. This, superseding the autonomy severally enjoyed

by the towns and cities since the middle ages (see COMMUNE), aimed at welding the citizens, who had hitherto been divided into classes and gilds, into one corporate whole, and giving them all an active share in the administration of public affairs, while reserving to the central authorities the power of effective control.

The system which obtains in all the old Prussian provinces (with the exception of Rügen and Vorpommern or Hither Pomerania) and in Westphalia is that of Stein, modified by subsequent laws—notably those of 1853 and 1856—which gave the state a greater influence, while extending the powers of the *Magistrat*. In Vorpommern and Rügen, and thus in the towns of Greifswald, Stralsund and Bergen, among others, the old civic constitutions remain unchanged. In the new Prussian provinces, Frankfort-on-Main received a special municipal constitution in 1867 and the towns of Schleswig-Holstein in 1869. The province of Hanover retains its system as emended in 1858, and Hesse-Nassau, with the exception of Frankfort-on-Main, received a special corporate system in 1897. The municipal systems of Bavaria, Württemberg and Saxony are more or less based on that of Stein, but with a wider sphere of self-government. In Mecklenburg there is no uniform system. In Saxe-Coburg, the towns of Coburg and Neustadt have separate and peculiar municipal constitutions. In almost all the other states the system is uniform. The free cities of Lübeck, Hamburg and Bremen, as sovereign states, form a separate class. Their constitutions are described in the articles on them.

Where the "magisterial" constitution prevails, the members of the *Magistrat*, *i.e.* the executive council (also called variously *Stadtrat*, *Gemeindevorstand*, &c.), are as a rule elected by the representative assembly of the burgesses (*Stadtverordnetenversammlung*; also *Gemeinderat*, *städtischer Ausschuss*, *Kollegium der Bürgervorsteher*, *Stadtältesten*, &c.). The *Magistrat* consists of the chief burgomaster (*Erster Bürgermeister* or *Stadtschultheiss*, and in the large cities Oberbürgermeister), a second burgomaster or assessor, and in large towns of a number of paid and unpaid town councillors (*Ratsherren*, *Senatoren*, *Schöffen*, *Ratsmänner*, *Magistratsräte*), together with certain salaried members selected for specific purposes (*e.g.* *Baurat*, for building). Over this executive body the *Stadtverordneten*, who are elected by the whole body of citizens and unpaid, exercise a general control, their assent being necessary to any measures of importance, especially those involving any considerable outlay. They are elected for from three to six years; the members of the *Magistrat* are chosen for six, nine or twelve years, sometimes even for life. In the large towns the burgomasters must be jurists, and are paid. The police are under the control of the *Magistrat*, except in certain large cities, where they are under a separate state department.

The second system mentioned above (*Bürgermeistereiverfassung*) prevails in the Rhine province, the Bavarian Palatinate, Hesse, Saxe-Weimar, Anhalt, Waldeck and the principalities of Reuss and Schwarzburg. In Württemberg, Baden and Hesse-Nassau the system is a compromise between the two; both the town and rural communes have a mayor (*Bürgermeister* or *Schultheiss*, as the case may be) and a *Gemeinderat* for administrative purposes, the citizens exercising control through a representative *Gemeindeausschuss* (communal committee).

Justice.—By the Judicature Act—*Gerichtsverfassungsgesetz*—of 1879, the so-called "regular litigious" jurisdiction of the courts of law was rendered uniform throughout the empire, and the courts are now everywhere alike in character and composition; and with the exception of the *Reichsgericht* (supreme court of the empire), immediately subject to the government of the state in which they exercise jurisdiction, and not to the imperial government. The courts, from the lowest to the highest, are *Amtsgericht*, *Landgericht*, *Oberlandesgericht* and *Reichsgericht*. There are, further, *Verwaltungsgerichte* (administrative courts) for the adjustment of disputes between the various organs of local government, and other special courts, such as military, consular and arbitration courts (*Schiedsgericht*). In addition to litigious business the courts also deal with non-litigious matters, such as the registration of titles to land, guardianship and the drawing up and custody of testamentary dispositions, all which are almost entirely within the province of the *Amtsgerichte*. There are uniform codes of criminal law (*Strafgesetzbuch*), commercial law and civil law (*Bürgerliches Gesetzbuch*), the last of which came into force on the 1st of January 1900. The criminal code, based on that of Prussia anterior to 1870, was gradually adopted by all the other states and was generally in force by 1872. It has, however, been frequently emended and supplemented.

The lowest courts of first instance are the *Amtsgerichte*, each presided over by a single judge, and with jurisdiction in petty criminal and civil cases, up to 300 marks (£15). They are also competent to deal with all disputes as to wages, and letting and hiring, without regard to the value of the object in dispute. Petty criminal cases are heard by the judge (*Amtsrichter*) sitting with two *Schöffen*—assessors—selected by lot from the jury lists, who are competent to try prisoners for offences punishable with a fine, not exceeding 600 marks (£30) or corresponding confinement, or with imprisonment not exceeding three months. The *Landgerichte* revise the decisions of the *Amtsgerichte*, and have also an original jurisdiction in criminal and civil cases and in divorce proceedings. The criminal chamber of the *Landgericht* is composed of five judges, and a majority of four is required for a conviction. These courts are competent to try cases of felony punishable with a term of imprisonment not exceeding five

years. The preliminary examination is conducted by a judge, who does not sit on the bench at the trial. Jury courts (*Schwurgerichte*) are not permanent institutions, but are periodically held. They are formed of three judges of the *Landgericht* and a jury of twelve; and a two-thirds majority is necessary to convict. There are 173 *Landgerichte* in the empire, being one court for every 325,822 inhabitants. The first court of second instance is the *Oberlandesgericht*, which has an original jurisdiction in grave offences and is composed of seven judges. There are twenty-eight such courts in the empire. Bavaria alone has an *Oberstes Landesgericht*, which exercises a revising jurisdiction over the *Oberlandesgerichte* in the state. The supreme court of the German empire is the *Reichsgericht*, having its seat at Leipzig. The judges, numbering ninety-two, are appointed by the emperor on the advice of the federal council (*Bundesrat*). This court exercises an appellate jurisdiction in civil cases remitted, for the decision of questions of law, by the inferior courts and also in all criminal cases referred to it. It sits in four criminal and six civil senates, each consisting of seven judges, one of whom is the president. The judges are styled *Reichsgerichtsräte* (counsellors of the imperial court).

In the *Amtsgericht* a private litigant may conduct his own case; but where the object of the litigation exceeds 300 marks (£15), and in appeals from the *Amtsgericht* to the *Landgericht*, the plaintiff (and also the defendant) must be represented by an advocate—*Rechtsanwalt*.

A *Rechtsanwalt*, having studied law at a university for four years and having passed two state examinations, if desiring to practise must be admitted as "defending counsel" by the *Amtsgericht* or *Landgericht*, or by both. These advocates are not state officials, but are sworn to the due execution of their duties. In case a client has suffered damage owing to the negligence of the advocate, the latter can be made responsible. In every district of the *Oberlandesgericht*, the *Rechtsanwälte* are formed into an *Anwaltkammer* (chamber of advocates), and the council of each chamber, sitting as a court of honour, deals with and determines matters affecting the honour of the profession. An appeal lies from this to a second court of honour, consisting of the president, three judges of the *Reichsgericht* and of three lawyers admitted to practice before that court.

Criminal prosecutions are conducted in the name of the crown by the *Staatsanwälte* (state attorneys), who form a separate branch of the judicial system, and initiate public prosecutions or reject evidence as being insufficient to procure conviction. The proceedings in the courts are, as a rule, public. Only in exceptional circumstances are cases heard *in camera*.

Military offences come before the military court and serious offences before the *Kriegsgericht*. The court-martial is, in every case, composed of the commander of the district as president, and four officers, assisted by a judge-advocate (*Kriegsgerichtsrat*), who conducts the case and swears the judges and witnesses. In the most serious class of cases, three officers and two judge-advocates are the judges. The prisoner is defended by an officer, whom he may himself appoint, and can be acquitted by a simple majority, but only be condemned by a two-thirds majority. There are also *Kaufmanns-* and *Gewerbegerichte* (commercial and industrial courts), composed of persons belonging to the classes of employers and employees, under the presidency of a judge of the court. Their aim is the effecting of a reconciliation between the parties. From the decision of these courts an appeal lies to the *Landgericht* where the amount of the object in dispute exceeds 100 marks (£5).

The following table shows the number of criminal cases tried before the courts of first instance, with the number and sex of convicted persons, and the number of the latter per 10,000 of the civil population over twelve years of age:—

Year.	Cases tried.		Persons convicted.		Total.	Convictions per 10,000 Inhabitants.
	Amtsgericht.	*Landgericht.*	Males.	Females.		
1900	1,143,687	94,241	396,975	72,844	469,819	119.5
1901	1,205,558	101,471	419,592	77,718	497,310	125.6
1902	1,221,080	104,434	431,257	81,072	512,329	127.3
1903	1,251,662	105,241	424,813	80,540	505,353	123.4
1904	1,287,686	105,457	435,191	81,785	516,976	124.2

Of those convicted in 1904, 225,326 had been previously convicted.

Poor Law.—A law passed by the North German Confederation of the 6th of June 1870, and subsequently amended by an imperial law of the 12th of March 1894, laid down rules for the relief of the destitute in all the states composing the empire, with the exception of Bavaria and Alsace-Lorraine. According to the system adopted, the public relief of the poor is committed to the care of local unions (*Ortsarmenverbände*) and provincial unions (*Landarmenverbände*), the former corresponding, generally, to the commune, and the latter to a far wider area, a circle or a province. Any person of eighteen years, who has continuously resided with a local union for the space of two years, there acquires his domicile. But any destitute German subject must be relieved by the local union in which he happens to be at the time, the cost of the relief being

defrayed by the local or provincial union in which he has his domicile. The wife and children have also their domicile in the place where the husband or father has his.[5]

Relief of the poor is one of the chief duties of the organs of local self-government. The moneys for the purpose are mainly derived from general taxation (poor rates per se being but rarely directly levied), special funds and voluntary contributions. In some German states and communes certain dues (such as the dog tax in Saxony), death duties and particularly dues payable in respect of public entertainments and police court fines, are assigned to the poor-relief chest. In some large towns the Elberfeld system of unpaid district visitors and the interworking of public and private charity is in force. The imperial laws which introduced the compulsory insurance of all the humbler workers within the empire, and gave them, when incapacitated by sickness, accident and old age, an absolute right to pecuniary assistance, have greatly reduced pauperism and crime.

Workmen's Insurance.—On June 15, 1883, the Reichstag, as the result of the policy announced by the emperor William I. in his speech from the throne in 1881, passed an act making insurance against sickness, accident, and incapacity compulsory on all workers in industrial pursuits. By further laws, in 1885 and 1892, this obligation was extended to certain other classes of workers, and the system was further modified by acts passed in 1900 and 1903. Under this system every person insured has a right to assistance in case of sickness, accident, or incapacity, while in case of death his widow and children receive an annuity.

1. Insurance against sickness is provided for under these laws partly by the machinery already existing, *i.e.* the sick benefit societies, partly by new machinery devised to meet the new obligation imposed. The sick-funds (*Krankenkassen*) are thus of seven kinds: (1) free assistance funds (*Freie Hilfskassen*), either registered under the law of 1876, as modified in 1884 (*Eingeschriebene Hilfskassen*), or established under the law of the separate states (*landesrechtliche Hilfskassen*); (2) *Betriebs-* or *Fabrikkrankenkassen*, funds established by individual factory-owners; (3) *Baukrankenkasse*, a fund established for workmen engaged on the construction (*Bau*) of particular engineering works (canal-digging, &c.), by individual contractors; (4) gild sick funds (*Innungskrankenkassen*), established by the gilds for the workmen and apprentices of their members; (5) miners' sick fund (*Knappschaftskasse*); (6) local sick fund (*Ortskrankenkasse*), established by the commune for particular crafts or classes of workmen; (7) *Gemeindekrankenversicherung*, *i.e.* insurance of members of the commune as such, in the event of their not subscribing to any of the other funds. Of these, 2, 3, 6 and 7 were created under the above-mentioned laws.

The number of such funds amounted in 1903 to 23,271, and included 10,224,297 workmen. The *Ortskrankenkassen*, with 4,975,322 members, had the greatest, and the *Baukrankenkassen*, with 16,459, the smallest number of members. The *Ortskrankenkassen*, which endeavour to include workmen of a like trade, have to a great extent, especially in Saxony, fallen under the control of the Social Democrats. The appointment of permanent doctors (*Kassenärzte*) at a fixed salary has given rise to much difference between the medical profession and this local sick fund; and the insistence on "freedom of choice" in doctors, which has been made by the members and threatens to militate against the interest of the profession, has been met on the part of the medical body by the appointment of a commission to investigate cases of undue influence in the selection.

According to the statistics furnished in the *Vierteljahreshefte zur Statistik des deutschen Reiches* for 1905, the receipts amounted to upwards of £10,000,000 for 1903, and the expenditure to somewhat less than this sum. Administrative changes were credited with nearly £600,000, and the invested funds totalled £9,000,000. The workmen contribute at the rate of two-thirds and the employers at the rate of one-third; the sum payable in respect of each worker varying from 1½-3% of the earnings in the "communal sick fund" to at most l½-4% in the others.

2. Insurance against old age and invalidity comprehends all persons who have entered upon their 17th year, and who belong to one of the following classes of wage-earners: artisans, apprentices, domestic servants, dressmakers, charwomen, laundresses, seamstresses, housekeepers, foremen, engineers, journeymen, clerks and apprentices in shops (excepting assistants and apprentices in chemists' shops), schoolmasters, schoolmistresses, teachers and governesses, provided the earnings do not exceed £100 per annum. The insured are arranged in five classes, according to the amount of their yearly earnings: viz. £17, 10s.; £27, 10s.; £47, 10s.; £57, 10s.; and £100. The contributions, affixed to a "pension book" in stamps, are payable each week, and amount, in English money, to 1.45d., 2.34d., 2.82d., 3.30d. and 4.23d. Of the contribution one half is paid by the employer and the other by the employee, whose duty it is to see that the amount has been properly entered in the pension book. The pensions, in case of invalidity, amount (including a state subsidy of £2, 10s. for each) respectively to £8, 8s.; £11, 5s.; £13, 10s.; £15, 15s.; and £18. The old-age pensions (beginning at 70 years) amount to £5, 10s.; £7; £8, 10s.; £10; and £11, 10s. The old-age and invalid insurance is carried out by thirty-one large territorial offices, to which must be added nine special unions. The income of the

forty establishments was, in 1903, £8,500,000 (including £1,700,000 imperial subsidy). The capital collected was upwards of £50,000,000.

It may be added that employees in mercantile and trading houses, who have not exceeded the age of 40 years and whose income is below £150, are allowed voluntarily to share in the benefits of this insurance.

3. *Accident Insurance* (*Unfallversicherung*).—The insurance of workmen and the lesser officials against the risks of accident is effected not through the state or the commune, but through associations formed *ad hoc*. These associations are composed of members following the same or allied occupations (*e.g.* foresters, seamen, smiths, &c.), and hence are called "professional associations" (*Berufsgenossenschaften*). They are empowered, subject to the limits set by the law, to regulate their own business by means of a general meeting and of elected committees. The greater number of these associations cover a very wide field, generally the whole empire; in such cases they are empowered to divide their spheres into sections, and to establish agents in different centres to inquire into cases of accident, and to see to the carrying out of the rules prescribed by the association for the avoidance of accidents. Those associations, of which the area of operations extends beyond any single state, are subordinate to the control of the imperial insurance bureau (*Reichsversicherungsamt*) at Berlin; those that are confined to a single state (as generally in the case of foresters and husbandmen) are under the control of the state insurance bureau (*Landesversicherungsamt*).

So far as their earnings do not exceed £150 per annum, the following classes are under the legal obligation to insure: labourers in mines, quarries, dockyards, wharves, manufactories and breweries; bricklayers and navvies; post-office, railway, and naval and military servants and officials; carters, raftsmen and canal hands; cellarmen, warehousemen; stevedores; and agricultural labourers. Each of these groups forms an association, which within a certain district embraces all the industries with which it is connected. The funds for covering the compensation payable in respect of accidents are raised by payments based, in agriculture, on the taxable capital, and in other trades and industries on the earnings of the insured. Compensation in respect of injury or death is not paid if the accident was brought about through the culpable negligence or other delict of the insured. In case of injury, involving incapacity for more than thirteen weeks (for the earlier period the *Krankenkassen* provide), the weekly sum payable during complete or permanent incapacity is fixed at the ratio of two-thirds of the earnings during the year preceding the accident, and in case of partial disablement, at such a proportion of the earnings as corresponds to the loss through disablement. In certain circumstances (*e.g.* need for paid nursing) the sum may be increased to the full rate of the previous earnings. In case of death, as a consequence of injury, the following payments are made: (1) a sum of at least £2, 10s. to defray the expenses of interment; (2) a monthly allowance of one-fifth of the annual earnings as above to the widow and each child up to the age of 15.

Life Insurance.—There were forty-six companies in 1900 for the insurance of life. The number of persons insured was 1,446,249 at the end of that year, the insurances amounting to roughly £320,000,000. Besides these are sixty-one companies—of which forty-six are comprised in the above life insurance companies—paying subsidies in case of death or of military service, endowments, &c. Some of these companies are industrial. The transactions of all these companies included in 1900 over 4,179,000 persons, and the amount of insurances effected was £80,000,000.

Religion.—So far as the empire as a whole is concerned there is no state religion, each state being left free to maintain its own establishment. Thus while the emperor, as king of Prussia, is *summus episcopus* of the Prussian Evangelical Church, as emperor he enjoys no such ecclesiastical headship. In the several states the relations of church and state differ fundamentally according as these states are Protestant or Catholic. In the latter these relations are regulated either by concordats between the governments and the Holy See, or by bulls of circumscription issued by the pope after negotiation. The effects of concordats and bulls alike are tempered by the exercise by the civil power of certain traditional reserved rights, *e.g.* the *placetum regium*, *recursus ab abusu*, *nominatio regia*, and that of vetoing the nomination of *personae minus gratae*. In the Protestant states the ecclesiastical authority remains purely territorial, and the sovereign remains effective head of the established church. During the 19th century, however, a large measure of ecclesiastical self-government (by means of general synods, &c.) was introduced, *pari passu* with the growth of constitutional government in the state; and in effect, though the theoretical supremacy of the sovereign survives in the church as in the state, he cannot exercise it save through the general synod, which is the state parliament for ecclesiastical purposes. Where a sovereign rules over a state containing a large proportion of both Catholics and Protestants, which is usually the case, both systems coexist. Thus in Prussia the relations of the Roman Catholic community to the Protestant state are regulated by arrangement between the Prussian government and Rome; while in Bavaria the king, though a Catholic, is legally *summus episcopus* of the Evangelical Church.

According to the religious census of 1900 there were in the German empire 35,231,104 Evangelical Protestants, 20,327,913 Roman Catholics, 6472 Greek Orthodox, 203,678 Christians belonging to other confessions, 586,948 Jews, 11,597 members of other sects and 5938 unclassified. The Christians belonging to other confessions include Moravian Brethren, Mennonites, Baptists, Methodists and Quakers, German Catholics, Old Catholics, &c. The table on following page shows the distribution of the population according to religious beliefs as furnished by the census of 1900.

Almost two-thirds of the population belong to the Evangelical Church, and rather more than a third to the Church of Rome; the actual figures (based on the census of 1900) being (%) Evangelical Protestants, 62.5; Roman Catholics, 36.1; Dissenters and others, .043, and Jews, 1.0. The Protestants have not increased proportionately in number since 1890, while the Roman Catholics show a small relative increase. Three states in Germany have a decidedly predominant Roman Catholic population, viz. Alsace-Lorraine, Bavaria and Baden; and in four states the Protestant element prevails, but with from 24 to 34% of Roman Catholics; viz. Prussia, Württemberg, Hesse and Oldenburg. In Saxony and the eighteen minor states the number of Roman Catholics is only from 0.3 to 3.3% of the population.

States.	Evangelicals.	Catholics.	Other Christians.	Jews.
Prussia	21,817,577	12,113,670	139,127	392,322
Bavaria	1,749,206	4,363,178	7,607	54,928
Saxony	3,972,063	198,265	19,103	12,416
Württemberg	1,497,299	650,392	9,426	11,916
Baden	704,058	1,131,639	5,563	26,132
Hesse	746,201	341,570	7,368	24,486
Mecklenburg-Schwerin	597,268	8,182	487	1,763
Saxe-Weimar	347,144	14,158	361	1,188
Mecklenburg-Strelitz	100,568	1,612	62	331
Oldenburg	309,510	86,920	1,334	1,359
Brunswick	436,976	24,175	1,271	1,824
Saxe-Meiningen	244,810	4,170	395	1,351
Saxe-Altenburg	189,885	4,723	206	99
Saxe-Coburg-Gotha	225,074	3,330	515	608
Anhalt	301,953	11,699	794	1,605
Schwarzburg-Sondershausen	79,593	1,110	27	166
Schwarzburg-Rudolstadt	92,298	676	37	48
Waldeck	55,285	1,831	164	637
Reuss-Greiz	66,860	1,043	444	48
Reuss-Schleiz	135,958	2,579	466	178
Schaumburg-Lippe	41,908	785	177	257
Lippe	132,708	5,157	205	879
Lübeck	93,671	2,190	213	670
Bremen	208,815	13,506	876	1,409
Hamburg	712,338	30,903	3,149	17,949
Alsace-Lorraine	372,078	1,310,450	4,301	32,379
Total	35,231,104	20,327,913	203,678	586,948

From the above table little can be inferred as to the geographical distribution of the two chief confessions. On this point it must be borne in mind that the population of the larger towns, on account of the greater mobility of the population since the introduction of railways and the abolition of restrictions upon free settlement, has become more mixed—Berlin, Leipzig, Hamburg, &c., showing proportionally more Roman Catholics, and Cologne, Frankfort-on-Main, Munich more Protestants than formerly. Otherwise the geographical limits of the confessions have been but little altered since the Thirty Years' War. In the mixed territories those places which formerly belonged to Roman Catholic princes are Roman Catholic still, and *vice versa*. Hence a religious map of South Germany looks like an historical map of the 17th century. The number of localities where the two confessions exist side by side is small. Generally speaking, South Germany is predominantly Roman Catholic. Some districts along the Danube (province of Bavaria, Upper Palatinate, Swabia), southern Württemberg and Baden, and in Alsace-Lorraine are entirely so. These territories are bordered by a broad stretch of country on the north, where Protestantism has maintained its hold since the time of the Reformation, including Bayreuth or eastern upper Franconia, middle Franconia, the northern half of Württemberg and Baden, with Hesse and the Palatinate. Here the average proportion of Protestants to Roman Catholics is two to one. The basin of the Main is again Roman Catholic from Bamberg to Aschaffenburg (western upper Franconia and lower Franconia). In Prussia the western and south-eastern provinces are mostly Roman Catholic, especially the Rhine province, together with the government districts of Münster and Arnsberg. The territories of the former principality of Cleves and of the countship of Mark (comprising very nearly the basin of the

Ruhr), which went to Brandenburg in 1609, must, however, be excepted. North of Münster, Roman Catholicism is still prevalent in the territory of the former bishopric of Osnabrück. In the east, East Prussia (Ermeland excepted) is purely Protestant. Roman Catholicism was predominant a hundred years ago in all the frontier provinces acquired by Prussia in the days of Frederick the Great, but since then the German immigrants have widely propagated the Protestant faith in these districts. A prevailingly Roman Catholic population is still found in the district of Oppeln and the countship of Glatz, in the province of Posen, in the Polish-speaking *Kreise* of West Prussia, and in Ermeland (East Prussia). In all the remaining territory the Roman Catholic creed is professed only in the Eichsfeld on the southern border of the province of Hanover and around Hildesheim.

Protestant Church.

The adherents of Protestantism are divided by their confessions into Reformed and Lutheran. To unite these the "church union" has been introduced in several Protestant states, as for example in Prussia and Nassau in 1817, in the Palatinate in 1818 and in Baden in 1822. Since 1817 the distinction has accordingly been ignored in Prussia, and Christians are there enumerated only as Evangelical or Roman Catholic. The union, however, has not remained wholly unopposed—a section of the more rigid Lutherans who separated themselves from the state church being now known as Old Lutherans. In 1866 Prussia annexed Hanover and Schleswig-Holstein, where the Protestants were Lutherans, and Hesse, where the Reformed Church had the preponderance. The inhabitants of these countries opposed the introduction of the union, but could not prevent their being subordinated to the Prussian *Oberkirchenrat* (high church-council), the supreme court of the state church. A synodal constitution for the Evangelical State Church was introduced in Prussia in 1875. The *Oberkirchenrat* retains the right of supreme management. The ecclesiastical affairs of the separate provinces are directed by consistorial boards. The parishes (*Pfarreien*) are grouped into dioceses (*Sprengel*), presided over by superintendents, who are subordinate to the superintendent-general of the province. Prussia has sixteen superintendents-general. The ecclesiastical administration is similarly regulated in the other countries of the Protestant creed. Regarding the number of churches and chapels Germany has no exact statistics.

Roman Catholic Church.

There are five archbishoprics within the German empire: Gnesen-Posen, Cologne, Freiburg (Baden), Munich-Freising and Bamberg. The twenty bishoprics are: Breslau (where the bishop has the title of "prince-bishop"), Ermeland (seat at Frauenburg, East Prussia), Kulm (seat at Pelplin, West Prussia), Fulda, Hildesheim, Osnabrück, Paderborn, Münster, Limburg, Trier, Metz, Strassburg, Spires, Würzburg, Regensburg, Passau, Eichstätt, Augsburg, Rottenburg (Württemberg) and Mainz. Apostolic vicariates exist in Dresden (for Saxony), and others for Anhalt and the northern missions.

The Old Catholics (*q.v.*), who seceded from the Roman Church in consequence of the definition of the dogma of papal infallibility, number roughly 50,000, with 54 clergy.

Jews.

It is in the towns that the Jewish element is chiefly to be found. They belong principally to the mercantile class, and are to a very large extent dealers in money. Their wealth has grown to an extraordinary degree. They are increasingly numerous in Hamburg, Berlin, Frankfort-on-Main, Breslau, Königsberg, Posen, Cologne, Nuremberg and Fürth. As a rule their numbers are proportionately greater in Prussia than elsewhere within the empire. But, since 1871, the Jewish population of Germany shows a far smaller increase than that of the Christian confessions, and even in the parts of the country where the Jewish population is densest it has shown a tendency to diminish. It is relatively greatest in the province of Posen, where the numbers have fallen from 61,982 (39.1 per thousand) in 1871 to 35,327 (18.7 per thousand) in 1900. The explanation is twofold—the extraordinary increase (1) in their numbers in Berlin and the province of Brandenburg, and (2) in the number of conversions to the Christian faith. In this last regard it may be remarked that the impulse is less from religious conviction than from a desire to associate on more equal terms with their neighbours. Though still, in fact at least, if not by law, excluded from many public offices, especially from commands in the army, they nevertheless are very powerful in Germany, the press being for the most part in their hands, and they furnish in many cities fully one-half of the lawyers and the members of the corporation. It should be mentioned, as a curious fact, that the numbers of the Jewish persuasion in the kingdom of Saxony increased from 3358 (1.3 per thousand) in 1871 to 12,416 (3 per thousand) in 1900.

Education.—In point of educational culture Germany ranks high among all the civilized great nations of the world (see EDUCATION: *Germany*). Education is general and compulsory throughout the empire, and all the states composing it have, with minor modifications, adopted the Prussian system providing for the establishment of elementary schools—*Volksschulen*—in every town and village. The school age is from six to fourteen, and parents can be compelled to send their children to a *Volksschule*, unless, to the satisfaction of the authorities, they are receiving adequate instruction in some other recognized school or institution.

The total number of primary schools was 60,584 in 1906-1907; teachers, 166,597; pupils,

9,737,262—an average of about one *Volksschule* to every 900 inhabitants. The annual expenditure was over £26,000,000, of which sum £7,500,000 was provided by state subvention. There were also in Germany in the same year 643 private schools, giving instruction similar to that of the elementary schools, with 41,000 pupils. A good criterion of the progress of education is obtained from the diminishing number of illiterate army recruits, as shown by the following:

Years.	Number of Recruits.	Unable to Read or Write.	
		Total.	Per 1000 Recruits.
1875-1876	139,855	3331	23.7
1880-1881	151,180	2406	15.9
1885-1886	152,933	1657	10.8
1890-1891	193,318	1035	5.4
1895-1896	250,287	374	1.5
1898-1899	252,382	173	0.7
1900-1901	253,000	131	0.45

Of the above 131 illiterates in 1900-1901, 114 were in East and West Prussia, Posen and Silesia.

Universities and Higher Technical Schools.—Germany owes its large number of universities, and its widely diffused higher education to its former subdivision into many separate states. Only a few of the universities date their existence from the 19th century; the majority of them are very much older. Each of the larger provinces, except Posen, has at least one university, the entire number being 21. All have four faculties except Münster, which has no faculty of medicine. As regards theology, Bonn, Breslau and Tübingen have both a Protestant and a Catholic faculty; Freiburg, Munich, Münster and Würzburg are exclusively Catholic; and all the rest are Protestant.

The following table gives the names of the 21 universities, the dates of their respective foundations, the number of their professors and other teachers for the winter half-year 1908-1909, and of the students attending their lectures during the winter half-year of 1907-1908:

	Date of Foundation.	Professors and Teachers.	Students.				Total.
			Theology.	Law.	Medicine.	Philosophy.	
Berlin	1809	493	326	2747	1153	3934	8220
Bonn	1818	190	395	833	282	1699	3209
Breslau	1811	189	330	617	284	840	2071
Erlangen	1743	77	155	323	355	225	1058
Freiburg	1457	150	219	373	580	642	1814
Giessen	1607	100	63	204	331	546	1144
Göttingen	1737	161	102	441	188	1126	1857
Greifswald	1456	105	68	188	186	361	803
Halle	1694	174	331	450	217	1239	2237
Heidelberg	1385	177	55	357	385	879	1676
Jena	1558	116	48	267	265	795	1375
Kiel	1665	121	35	271	239	480	1025
Königsberg	1544	152	68	317	218	502	1105
Leipzig	1409	234	303	1013	606	2419	4341
Marburg	1527	117	133	400	261	876	1670
Munich	1826	239	169	1892	1903	1979	5943
Münster	1902	95	278	458	. .	870	1606
Rostock	1418	65	48	67	211	322	648
Strassburg	1872	167	241	369	255	844	1709
Tübingen	1477	111	464	467	263	384	1578
Würzburg	1582	102	106	331	625	320	1382

Not included in the above list is the little academy—Lyceum Hosianum—at Braunsberg in Prussia, having faculties of theology (Roman Catholic) and philosophy, with 13 teachers and 150 students. In all the universities the number of matriculated students in 1907-1908 was 46,471, including 320 women, 2 of whom studied theology, 14 law, 150 philosophy and 154 medicine. There were also, within the same period, 5653 non-matriculated *Hörer* (hearers), including 2486 women.

Ten schools, technical high schools, or *Polytechnica*, rank with the universities, and have the power of granting certain degrees. They have departments of architecture, building, civil

engineering, chemistry, metallurgy and, in some cases, anatomy. These schools are as follows: Berlin (Charlottenburg), Munich, Darmstadt, Karlsruhe, Hanover, Dresden, Stuttgart, Aix-la-Chapelle, Brunswick and Danzig; in 1908 they were attended by 14,149 students (2531 foreigners), and had a teaching staff of 753. Among the remaining higher technical schools may be mentioned the three mining academies of Berlin, Clausthal, in the Harz, and Freiberg in Saxony. For instruction in agriculture there are agricultural schools attached to several universities—notably Berlin, Halle, Göttingen, Königsberg, Jena, Poppelsdorf near Bonn, Munich and Leipzig. Noted academies of forestry are those of Tharandt (in Saxony), Eberswalde, Münden on the Weser, Hohenheim near Stuttgart, Brunswick, Eisenach, Giessen and Karlsruhe. Other technical schools are again the five veterinary academies of Berlin, Hanover, Munich, Dresden and Stuttgart, the commercial colleges (*Handelshochschulen*) of Leipzig, Aix-la-Chapelle, Hanover, Frankfort-on-Main and Cologne, in addition to 424 commercial schools of a lesser degree, 100 schools for textile manufactures and numerous schools for special metal industries, wood-working, ceramic industries, naval architecture and engineering and navigation. For military science there are the academies of war (*Kriegsakademien*) in Berlin and Munich, a naval academy in Kiel, and various cadet and non-commissioned officers' schools.

Libraries.—Mental culture and a general diffusion of knowledge are extensively promoted by means of numerous public libraries established in the capital, the university towns and other places. The most celebrated public libraries are those of Berlin (1,000,000 volumes and 30,000 MSS.); Munich (1,000,000 volumes, 40,000 MSS.); Heidelberg (563,000 volumes, 8000 MSS.); Göttingen (503,000 volumes, 6000 MSS.); Strassburg (760,000 volumes); Dresden (500,000 volumes, 6000 MSS.); Hamburg (municipal library, 600,000 volumes, 5000 MSS.); Stuttgart (400,000 volumes, 3500 MSS.); Leipzig (university library, 500,000 volumes, 5000 MSS.); Würzburg (350,000 volumes); Tübingen (340,000 volumes); Rostock (318,000 volumes); Breslau (university library, 300,000 volumes, 7000 MSS.); Freiburg-im-Breisgau (250,000 volumes); Bonn (265,000 volumes); and Königsberg (230,000 volumes, 1100 MSS.). There are also famous libraries at Gotha, Wolfenbüttel and Celle.

Learned Societies.—There are numerous societies and unions, some of an exclusively scientific character and others designed for the popular diffusion of useful knowledge. Foremost among German academies is the Academy of Sciences (*Akademie der Wissenschaften*) in Berlin, founded in 1700 on Leibnitz's great plan and opened in 1711. After undergoing various vicissitudes, it was reorganized by Frederick the Great on the French model and received its present constitution in 1812. It has four sections: physical, mathematical, philosophical and historical. The members are (1) ordinary (50 in number, each receiving a yearly dotation of £30), and (2) extraordinary, consisting of honorary and corresponding (foreign) members. It has published since 1811 a selection of treatises furnished by its most eminent men, among whom must be reckoned Schleiermacher, the brothers Humboldt, Grimm, Savigny, Böckh, Ritter and Lachmann, and has promoted philological and historical research by helping the production of such works as *Corpus inscriptionum Graecarum*; *Corpus inscriptionum Latinarum*; *Monumenta Germaniae historica*, the works of Aristotle, Frederick the Great's works and Kant's collected works. Next in order come (1) the Academy of Sciences at Munich, founded in 1759, divided into three classes, philosophical, historical and physical, and especially famous for its historical research; (2) the Society of Sciences (*Gesellschaft der Wissenschaften*) in Göttingen, founded in 1742; (3) that of Erfurt, founded 1758; (4) Görlitz (1779) and (5) the "Royal Saxon Society of Sciences" (*Königliche sächsische Gesellschaft der Wissenschaften*), founded in Leipzig in 1846. Ample provision is made for scientific collections of all kinds in almost all places of any importance, either at the public expense or through private munificence.

Observatories.—These have in recent years been considerably augmented. There are 19 leading observatories in the empire, viz. at Bamberg, Berlin (2), Bonn, Bothkamp in Schleswig, Breslau, Düsseldorf, Gotha, Göttingen, Hamburg, Heidelberg, Jena, Kiel, Königsberg, Leipzig, Munich, Potsdam, Strassburg and Wilhelmshaven.

Book Trade.—This branch of industry, from the important position it has gradually acquired since the time of the Reformation, is to be regarded as at once a cause and a result of the mental culture of Germany. Leipzig, Berlin and Stuttgart are the chief centres of the trade. The number of booksellers in Germany was not less than 10,000 in 1907, among whom were approximately 6000 publishers. The following figures will show the recent progress of German literary production, in so far as published works are concerned:

Year	1570	1600	1618	1650	1700	1750	1800	1840	1884	1902
Books	229	791	1293	725	951	1219	3335	6904	15,607	26,902

Newspapers.—While in England a few important newspapers have an immense circulation, the newspapers of Germany are much more numerous, but on the whole command a more limited sale. Some large cities, notably Berlin, Cologne, Hamburg, Dresden, Leipzig and

Munich, have, however, newspapers with a daily circulation of over 100,000 copies, and in the case of some papers in Berlin a million copies is reached. Most readers receive their newspapers through the post office or at their clubs, which may help to explain the smaller number of copies sold.

Fine Arts.—Perhaps the chief advantage which Germany has derived from the survival of separate territorial sovereignties within the empire has been the decentralization of culture. Patronage of art is among the cherished traditions of the German princes; and even where—as for instance at Cassel—there is no longer a court, the artistic impetus given by the former sovereigns has survived their fall. The result has been that there is in Germany no such concentration of the institutions for the encouragement and study of the fine arts as there is in France or England. Berlin has no practical monopoly, such as is possessed by London or Paris, of the celebrated museums and galleries of the country. The picture galleries of Dresden, Munich and Cassel still rival that at Berlin, though the latter is rapidly becoming one of the richest in the world in works of the great masters, largely at the cost of the private collections of England. For the same reason the country is very well provided with excellent schools of painting and music. Of the art schools the most famous are those of Munich, Düsseldorf, Dresden and Berlin, but there are others, *e.g.* at Karlsruhe, Weimar and Königsberg. These schools are in close touch with the sovereigns and the governments, and the more promising pupils are thus from the first assured of a career, especially in connexion with the decoration of public buildings and monuments. To this fact is largely due the excellence of the Germans in grandiose decorative painting and sculpture, a talent for the exercise of which plenty of scope has been given them by the numerous public buildings and memorials raised since the war of 1870. Perhaps for this very reason, however, the German art schools have had no such cosmopolitan influence as that exercised by the schools of Paris, the number of foreign students attending them being comparatively small. It is otherwise with the schools of music, which exercise a profound influence far beyond the borders of Germany. Of these the most important are the conservatoires of Leipzig, Dresden, Berlin, Munich and Frankfort-on-Main. The fame of Weimar as a seat of musical education, though it possesses an excellent conservatoire, is based mainly on the tradition of the abbé Liszt, who gathered about him here a number of distinguished pupils, some of whom have continued to make it their centre. Music in Germany also receives a great stimulus from the existence, in almost every important town, of opera-houses partly supported by the sovereigns or by the civic authorities. Good music being thus brought within the reach of all, appreciation of it is very wide-spread in all classes of the population. The imperial government maintains institutes at Rome and Athens which have done much for the advancement of archaeology.

(P. A. A.)

Army.—The system of the “nation in arms” owes its existence to the reforms in the Prussian army that followed Jena. The “nation in arms” itself was the product of the French Revolutionary and Napoleonic wars, but it was in Prussia that was seen the systematization and the economical and effective application of the immense forces of which the revolutionary period had demonstrated the existence (see also Army; Conscription; French Revolutionary Wars, &c.). It was with an army and a military system that fully represented the idea of the “nation in arms” that Prussia created the powerful Germany of later days, and the same system was extended by degrees over all the other states of the new empire. But these very successes contained in themselves the germ of new troubles. Increased prosperity, a still greater increase in population and the social and economic disturbances incidental to the conversion of an agricultural into a manufacturing community, led to the practical abandonment of the principle of *universal* service. More men came before the recruiting officer than there was money to train; and in 1895 the period of service with the colours was reduced from three to two years—a step since followed by other military powers, the idea being that with the same peace effective and financial grants half as many men again could be passed through the ranks as before.

In 1907 the recruiting statistics were as follows:

Number of young men attaining service age (including those who had voluntarily enlisted before their time)		556,772
Men belonging to previous years who had been put back for re-examination, &., still borne on the lists		657,753
		1,214,525
Deduct—Physically unfit, &c.	35,802	
Struck off	860	
Voluntarily enlisted in the army and navy, on or before attaining service age	57,739	
Assigned as recruits to the navy	10,374	
Put back, &c.	684,193	
		788,968

Available as army recruits, fit		425,557
Of these, (*a*) Assigned to the active army for two or three years' service with the colours		212,661
(*b*) Assigned to the Ersatz-Reserve of the army and navy	*untrained*	89,877
(*c*) Assigned to the 1st levy of Landsturm		123,019
		425,557

Thus only half the men on whom the government has an effective hold go to the colours in the end. Moreover few of the men "put back, &c.," who figure on both sides of the account for any one year, and seem to average 660,000, are really "put back." They are in the main those who have failed or fail to present themselves, and whose names are retained on the liability lists against the day of their return. Many of these have emigrated.

By the constitution of the 16th of April 1871 every German is liable to service and no substitution is allowed. Liability begins at the age of seventeen, and actual service, as a rule, from the age of twenty. The men serve in the active army and army reserve for seven years, of which two years (three in the case of cavalry and horse artillery recruits) are spent with the colours. During his four or five years in the reserve, the soldier is called out for training with his corps twice, for a maximum of eight weeks (in practice usually for six). After quitting the reserve the soldier is drafted into the first ban of the *Landwehr* for five years more, in which (except in the cavalry, which is not called out in peace time) he undergoes two trainings of from eight to fourteen days. Thence he passes into the second ban and remains in it until he has completed his thirty-ninth year—*i.e.* from six to seven years more, the whole period of army and Landwehr service being thus nineteen years. Finally, all soldiers are passed into the *Landsturm*, in the first ban of which they remain until the completion of their forty-fifth year. The second ban consists of untrained men between the ages of thirty-nine and forty-five. Young men who reach a certain standard of education, however, are only obliged to serve for one year in the active army. They are called One-Year Volunteers (*Einjährig-Freiwilligen*), defray their own expenses and are the chief source of supply of reserve and Landwehr officers. That proportion of the annual contingents which is dismissed untrained goes either to the Ersatz-Reserve or to the 1st ban of the Landsturm (the Landwehr, it will be observed, contains only men who have served with the colours). The Ersatz consists exclusively of young men, who would in war time be drafted to the regimental depots and thence sent, with what training circumstances had in the meantime allowed, to the front. Some men of the Ersatz receive a short preliminary training in peace time.

In 1907 the average height of the private soldiers was 5 ft. 6 in., that of the non-commissioned officers 5 ft. 6½ in., and that of the one-year volunteers 5 ft. 9½ in. A much greater proportion of the country recruits were accepted as "fit" than of those coming from the towns. Voluntary enlistments of men who desired to become non-commissioned officers were most frequent in the provinces of the old Prussian monarchy, but in Berlin itself and in Westphalia the enlistments fell far short of the number of non-commissioned officers required for the territorial regiments of the respective districts. Above all, in Alsace-Lorraine one-eighth only of the required numbers were obtained.

Peace and War Strengths.—German military policy is revised every five years; thus a law of April 1905 fixes the strength and establishments to be attained on March 31, 1910, the necessary augmentations, &c., being carried out gradually in the intervening years. The peace strength for the latter date was fixed at 505,839 men (not including officers, non-commissioned officers and one-year volunteers), forming—

633	battalions infantry.
510	squadrons cavalry.
574	batteries field and horse artillery.
40	battalions foot artillery.
29	battalions pioneers.
12	battalions communication troops.
23	train battalions, &c.

The addition of about 25,000 officers and 85,000 non-commissioned officers, one-year men, &c., brings the peace footing of the German army in 1910 to a total of about 615,000 of all ranks.

As for war, the total fighting strength of the German nation (including the navy) has been placed at as high a figure as 11,000,000. Of these 7,000,000 have received little or no training, owing to medical unfitness, residence abroad, failure to appear, surplus of annual contingents, &c., as already explained, and not more than 3,000,000 of these would be available in war. The

real military resources of Germany, untrained and trained, are thus about 7,000,000, of whom 4,000,000 have at one time or another done a continuous period of service with the colours.[6] This is of course for a war of defence *à outrance*. For an offensive war, only the active army, the reserve, the Ersatz and the 1st levy of the Landwehr would be really available.

A rough calculation of the number of these who go to form or to reinforce the field armies and the mobilized garrisons may be given:

Cadres of officers and non-commissioned officers	100,000
From 7 annual contingents of recruits (*i.e.* active army and reserve)	1,200,000
From 5 contingents of Landwehr (1st ban)	600,000
From 7 classes of Ersatz reserve called to the depots, able-bodied men	400,000
One-year volunteers recalled to the colours or serving as reserve and Landwehr officers	100,000
	2,400,000

These again would divide into a first line army of 1,350,000 and a second of 1,050,000. It is calculated that the field army would consist, in the third week of a great war, of 633 battalions, 410 squadrons and 574 batteries, with technical, departmental and medical troops (say 630,000 bayonets, 60,000 sabres and 3444 guns, or 750,000 men), and that these could be reinforced in three or four weeks by 350 fresh battalions. Behind these forces there would shortly become available for secondary operations about 460 battalions of the 1st ban Landwehr, and 200 squadrons and about 220 batteries of the reserve and Landwehr. In addition, each would leave behind depot troops to form the nucleus on which the 2nd ban Landwehr and the Landsturm would eventually be built up. The total number of units of the three arms in all branches may be stated approximately at 2200 battalions, 780 squadrons and 950 batteries.

Command and Organization.—By the articles of the constitution the whole of the land forces of the empire form a united army in war and peace under the orders of the emperor. The sovereigns of the chief states are entitled to nominate the lower grades of officers, and the king of Bavaria has reserved to himself the special privilege of superintending the general administration of the three Bavarian army corps; but all appointments are made subject to the emperor’s approval. The emperor is empowered to erect fortresses in any part of the empire. It is the almost invariable practice of the kings of Prussia to command their forces in person, and the army commands, too, are generally held by leaders of royal or princely rank. The natural corollary to this is the assignment of special advisory duties to a responsible chief of staff. The officers are recruited either from the Cadet Corps at Berlin or from amongst those men, of sufficient social standing, who join the ranks as “avantageurs” with a view to obtaining commissions. Reserve and Landwehr officers are drawn from among officers and selected non-commissioned officers retired from the active army, and one-year volunteers who have passed a special examination. All candidates, from whatever source they come, are subject to approval or rejection by their brother officers before being definitively commissioned. Promotion in the German army is excessively slow, the senior subalterns having eighteen to twenty years’ commissioned service and the senior captains sometimes thirty. The number of officers on the active list is about 25,000. The under-officers number about 84,000.

The German army is organized in twenty-three army corps, stationed and recruited in the various provinces and states as follows: Guard, Berlin (general recruiting); I. Königsberg (East Prussia); II. Stettin (Pomerania); III. Berlin (Brandenburg); IV. Magdeburg (Prussian Saxony); V. Posen (Poland and part of Silesia); VI. Breslau (Silesia); VII. Münster (Westphalia); VIII. Coblenz (Rhineland); IX. Altona (Hanse Towns and Schleswig-Holstein); X. Hanover (Hanover); XI. Cassel (Hesse-Cassel); XII. Dresden (Saxony); XIII. Stuttgart (Württemberg); XIV. Karlsruhe (Baden); XV. Strassburg (Alsace); XVI. Metz (Lorraine); XVII. Danzig (West Prussia); XVIII. Frankfurt-am-Main (Hesse Darmstadt, Main country); XIX. Leipzig (Saxony); I. Bavarian Corps, Munich; II. Bavarian Corps, Würzburg; III. Bavarian Corps, Nuremberg. The formation of a XX. army corps out of the extra division of the XIV. corps at Colmar in Alsace, with the addition of two regiments from Westphalia and drafts of the XV. and XVI. corps, was announced in 1908 as the final step of the programme for the period 1906-1910. The normal composition of an army corps on war is (*a*) staff, (*b*) 2 infantry divisions, each of 2 brigades (4 regiments or 12 battalions), 2 regiments of field artillery (comprising 9 batteries of field-guns and 3 of field howitzers, 72 pieces in all), 3 squadrons of cavalry, 1 or 2 companies of pioneers, a bridge train and 1 or 2 bearer companies; (*c*) corps troops, 1 battalion rifles, telegraph troops, bridge train, ammunition columns, train (supply) battalion, field bakeries, bearer companies and field hospitals, &c., with, as a rule, one or two batteries of heavy field howitzers or mortars and a machine-gun group. The remainder of the cavalry and horse artillery attached to the army corps in peace goes in war to form the cavalry divisions. Certain corps have an increased effective; thus the Guard has a whole cavalry division, and the I. corps (Königsberg) has three

divisions. Several corps possess an extra infantry brigade of two 2-battalion regiments, but these, unless stationed on the frontiers, are gradually absorbed into new divisions and army corps. In war several army corps, cavalry divisions and reserve divisions are grouped in two or more “armies,” and in peace the army corps are divided for purposes of superior control amongst several “army inspections.”

The cavalry is organized in regiments of cuirassiers, dragoons, lancers, hussars and mounted rifles,[7] the regiments having four service and one depot squadrons. Troopers are armed with lance, sword and carbine (for which in 1908 the substitution of a short rifle with bayonet was suggested). In peace time the highest permanent organization is the brigade of two regiments or eight squadrons, but in war and at manœuvres divisions of three brigades, with horse artillery attached, are formed.

The infantry consists of 216 regiments, mostly of three battalions each. These are numbered, apart from the eight Guard regiments and the Bavarians, serially throughout the army. Certain regiments are styled grenadiers and fusiliers. In addition there are eighteen chasseur or rifle battalions (*Jäger*). The battalion has always four companies, each, at war strength, 250 strong. The armament of the infantry is the model 1898 magazine rifle and bayonet (see RIFLE).

The field (including horse) artillery consists in peace of 94 regiments subdivided into two or three groups (*Abteilungen*), each of two or three 6-gun batteries. The field gun in use is the quick-firing gun 96/N.A. (see ORDNANCE: *Field Equipments*).

The foot artillery is intended for siege and fortress warfare, and to furnish the heavy artillery of the field army. It consists of forty battalions. Machine gun detachments, resembling 4-gun batteries and horsed as artillery, were formed to the number of sixteen in 1904-1906. These are intended to work with the cavalry divisions. Afterwards it was decided to form additional small groups of two guns each, less fully horsed, to assist the infantry, and a certain number of these were created in 1906-1908.

The engineers are a technical body, not concerned with field warfare or with the command of troops. On the other hand, the pioneers (29 battalions) are assigned to the field army, with duties corresponding roughly to those of field companies R.E. in the British service. Other branches represented in Great Britain by the Royal Engineers are known in Germany by the title “communication troops,” and comprise railway, telegraph and airship and balloon battalions. The Train is charged with the duties of supply and transport. There is one battalion to each army corps.

Remounts.—The peace establishment in horses is approximately 100,000. Horses serve eight to nine years in the artillery and nine to ten in the cavalry, after which, in the autumn of each year, they are sold, and their places taken by remounts. The latter are bought at horse-fairs and private sales, unbroken, and sent to the 25 remount depots, whence, when fit for the service, they are sent to the various units, as a rule in the early summer. Most of the cavalry and artillery riding horses come from Prussia proper. The Polish districts produce swift Hussar horses of a semi-eastern type. Hanover is second only to East Prussia in output of horses. Bavaria, Saxony and Württemberg do not produce enough horses for their own armies and have to draw on Prussia. Thirteen thousand four hundred and forty-five young horses were bought by the army authorities during 1907. The average price was about £51 for field artillery draught horses, £65 for heavy draught horses, and £46 for riding horses.

The military expenditure of Germany, according to a comparative table furnished to the House of Commons by the British war office in 1907, varied between £36,000,000 and £44,000,000 per annum in the period 1899-1902, and between £42,000,000 and £51,000,000 per annum in that of 1905-1909.

Colonial Troops.—In 1906 these, irrespective of the brigade of occupation then maintained in north China and of special reinforcements sent to S.W. Africa during the Herrero war, consisted of the *German East Africa* troops, 220 Europeans and 1470 natives; the *Cameroon* troops, 145 European and 1170 natives; *S.W. African troops*, entirely European and normally consisting of 606 officers and men active and a reserve of ex-soldier settlers; the Kiao-Chau garrison (chiefly marines), numbering 2687 officers and men; and various small police forces in Togo, New Guinea, Samoa, &c.

Fortresses.—The fixed defences maintained by the German empire (apart from naval ports and coast defences) belong to two distinct epochs in the military policy of the state. In the first period (roughly 1871-1899), which is characterized by the development of the offensive spirit, the fortresses, except on the French and Russian frontiers, were reduced to a minimum. In the interior only Spandau, Cüstrin, Magdeburg, Ingolstadt and Ulm were maintained as defensive supporting points, and similarly on the Rhine, which was formerly studded with fortresses from Basel to Emmerich, the defences were limited to New Breisach, Germersheim, Mainz, Coblenz, Cologne and Wesel, all of a “barrier” character and not organized specially as centres of activity for field armies. The French frontier, and to a less extent the Russian, were organized offensively. Metz, already surrounded by the French with a girdle of forts, was extended and

completed (see FORTIFICATION AND SIEGECRAFT) as a great entrenched camp, and Strassburg, which in 1870 possessed no outlying works, was similarly expanded, though the latter was regarded an instrument of defence more than of attack. On the Russian frontier Königsberg, Danzig, Thorn, Posen, Glogau (and on a smaller scale Boyen in East Prussia and Graudenz on the Vistula) were modernized and improved.

From 1899, however, Germany began to pay more attention to her fixed defences, and in the next years a long line of fortifications came into existence on the French frontier, the positions and strength of which were regulated with special regard to a new strategic disposition of the field armies and to the number and sites of the "strategic railway stations" which were constructed about the same time. Thus, the creation of a new series of forts extending from Thionville (Diedenhofen) to Metz and thence south-eastward was coupled with the construction of twelve strategic railway stations between Cologne and the Belgian frontier, and later—the so-called "fundamental plan" of operations against France having apparently undergone modification in consequence of changes in the foreign relations of the German government—an immense strategic railway station was undertaken at Saarburg, on the right rear of Thionville and well away from the French frontier, and many important new works both of fortification and of railway construction were begun in Upper Alsace, between Colmar and Basel.

The coast defences include, besides the great naval ports of Wilhelmshaven on the North Sea and Kiel on the Baltic, Danzig, Pillau, Memel, Friedrichsort, Cuxhaven, Geestemünde and Swinemünde.

(C. F. A.)

Navy.—The German navy is of recent origin. In 1848 the German people urged the construction of a fleet. Money was collected, and a few men-of-war were fitted out; but these were subsequently sold, the German *Bundestag* (federal council) not being in sympathy with the aspirations of the nation. Prussia however, began laying the foundations of a small navy. To meet the difficulty arising from the want of good harbours in the Baltic, a small extent of territory near Jade Bay was bought from Oldenburg in 1854, for the purpose of establishing a war-port there. Its construction was completed at enormous expense, and it was opened for ships by the emperor in June 1869 under the name of Wilhelmshaven. In 1864 Prussia, in annexing Holstein, obtained possession of the excellent port of Kiel, which has since been strongly fortified. From the time of the formation of the North German Confederation the navy has belonged to the common federal interest. Since 1st October 1867 all its ships have carried the same flag, of the national colours—black, white, red, with the Prussian eagle and the iron cross.

From 1848 to 1868 the increase of the navy was slow. In 1851 it consisted of 51 vessels, including 36 small gunboats of 2 guns each. In 1868 it consisted of 45 steamers (including 2 ironclads) and 44 sailing vessels, but during the various wars of the period 1848-1871, only a few minor actions were fought at sea, and for many years after the French War the development of the navy did not keep pace with that of the empire's commercial interests beyond the seas, or compete seriously with the naval power of possible rivals. But towards the end of the 19th century Germany started on a new naval policy, by which her fleet was largely and rapidly increased. Details of this development will be found in the article NAVY (see also *History* below, *ad fin.*). It will be sufficient here to give the statistics relating to the beginning of the year 1909, reference being made only to ships effective at that date and to ships authorized in the construction programme of 1907:

Modern battleships	20	effective, 4 approaching completion.
Old battleships and coast defence ships	11	effective (4 non-effective).
Armoured cruisers	9	effective, 1 approaching completion.
Protected cruisers	31	effective, 2 approaching completion.
Torpedo craft of modern types	130	effective, 3 approaching completion.

Administration.—In 1889 the administration was transferred from the ministry of war to the imperial admiralty (*Reichsmarineamt*), at the head of which is the naval secretary of state. The chief command was at the same time separated from the administration and vested in a naval officer, who controls the movements of the fleet, its personnel and training, while the maintenance of the arsenals and dockyards, victualling and clothing and all matters immediately affecting the *matériel*, fall within the province of the secretary of state. The navy is divided between the Baltic (Kiel) and North Sea (Wilhelmshaven) stations, which are strategically linked by the Kaiser Wilhelm Canal (opened in 1895), across the Schleswig-Holstein peninsula. Danzig, Cuxhaven and Sonderburg have also been made naval bases.

Personnel.—The German navy is manned by the obligatory service of the essentially maritime population—such as sailors, fishermen and others, as well as by volunteers, who elect for naval service in preference to that in the army. It is estimated that the total seafaring population of Germany amounts to 80,000. The active naval personnel was, in 1906, 2631 officers (including

engineers, marines, medical, &c.) and 51,138 under-officers and men, total 53,769. In addition, there is a reserve of more than 100,000 officers and men.

(P. A. A.)

Finance.—The imperial budget is voted every year by the Reichstag. The “extraordinary funds,” from which considerable sums appear annually in the budget, were created after the Franco-German War. Part of the indemnity was invested for definite purposes. The largest of these investments served for paying the pensions of the invalided, and amounted originally to £28,000,000. Every year, not only the interest, but part of the capital is expended in paying these pensions, and the capital sum was thus reduced in 1903 to £15,100,000, and in 1904 to £13,200,000. Another fund, of about £5,200,000, serves for the construction and armament of fortresses; while £6,000,000, known as the *Reichskriegsschatz*—or “war treasure fund”—is not laid out at interest, but is stored in coined gold and bullion in the Juliusturm at Spandau. In addition to these, the railways in Alsace-Lorraine, which France bought of the Eastern Railway Company for £13,000,000, in order to transfer them to the control of Germany, are also the property of the empire.

During the years 1908 and 1909 considerable public discussion and political activity were devoted to the reorganization of German imperial finance, and it is only possible here to deal historically with the position up to that time, since further developments of an important nature were already foreshadowed.

In 1871 the system accepted was that the imperial budget should be financed substantially by its reliance on the revenue from what were the obvious imperial resources—customs and excise duties, stamp duties, post and telegraph receipts, and among minor sources the receipts from the Alsace-Lorraine railways. But it was also provided that, for the purpose of deficits, the states should, in addition, if required by the imperial minister of finance, contribute their quotas according to population—*Matrikular Beiträge*. It was not expected that these would become chronic, but in a few years, and emphatically by the early ’eighties, they were found to be an essential part of the financial system, owing to regular deficits. It had been intended that, in return for the *Matrikular Beiträge*, regular assignments (*Überweisungen*) should be returned to the states, in relief of their own taxation, which would practically wipe out the contribution; but instead of these the *Überweisungen* were considerably less. Certain reorganizations were made in 1887 and 1902, but the excess of the *Matrikular Beiträge* over the *Überweisungen* continued; the figures in 1905 and 1908 being as follows (in millions of marks):—

	Matrikular-Beiträge.	Überweisungen.	Excess.
1905	213	189	24
1908	346	195	150

These figures show how natural it was to desire to relieve the states by increasing the direct imperial revenue. 827

Meanwhile, in spite of the “matricular contributions,” the calls on imperial finance had steadily increased, and up to 1908 were continually met to a large extent by loans, involving a continual growth of the imperial debt, which in 1907 amounted to 3643 millions of marks. The imperial budget, like that of most European nations, is divided into two portions, the ordinary and the extraordinary; and the increase under both heads (especially for army and navy) became a recurrent factor. A typical situation is represented by the main figures for 1905 and 1906 (in millions of marks):

	Expenditure.		Revenue.	Raised by Loan.
	Ordinary.	Extra-ordinary.		
1905	2002	193	2053	341
1906	2157	235	2118	258

The same process went on in 1907 and 1908, and it was necessarily recognized that the method of balancing the imperial budget by a regular increase of debt could not be satisfactory in a country where the general increase of wealth and taxable capacity had meanwhile been conspicuous. And though the main proposals made by the government for new taxation, including new direct taxes, resulted in a parliamentary deadlock in 1909, and led to Prince von Bülow’s resignation as chancellor, it was already evident that some important reorganization of the imperial financial system was inevitable.

Currency.—The German empire adopted a gold currency by the law of the 4th of December 1871. Subsequently the old local coinages (*Landesmünzen*) began to be called in and replaced by new gold and silver coins. The old gold coins, amounting to £4,550,000, had been called in as early as 1873; and the old silver coins have since been successively put out of circulation, so that none actually remains as legal tender but the thaler (3s.). The currency reform was at first facilitated by the French indemnity, a great part of which was paid in gold. But later on that metal became scarcer; the London gold prices ran higher and higher, while silver prices declined. The average rate per ounce of standard silver in 1866-1870 was 60⅝d., in January 1875 only 57½d., in July 1876 as low as 49d. It rose in January 1877 to 57½d., but again declined, and in September 1878 it was 50⅝d. While the proportion of like weights of fine gold and fine silver in 1866-1870 averaged 1 to 15.55, it was 1 to 17.79 in 1876, 1 to 17.18 in 1877, and, in 1902, in consequence of the heavy fall in silver, the ratio became as much as 1 to 39. By the currency law of the 9th of July 1873, the present coinage system was established and remains, with certain minor modifications, now in force as then introduced. The unit is the mark (1 shilling)—the tenth part of the imperial *gold coin* (Krone = crown), of which last 139½ are struck from a pound of pure gold. Besides these ten-mark pieces, there are Doppelkronen (double crowns), about equivalent in value to an English sovereign (the average rate of exchange being 20 marks 40 pfennige per £1 sterling), and, formerly, half-crowns (halbe Kronen = 5 marks) in gold were also issued, but they have been withdrawn from circulation. Silver coins are 5, 2 and 1 mark pieces, equivalent to 5, 2 and 1 shillings respectively, and 50 pfennige pieces = 6d. Nickel coins are 10 and 5 pfennige pieces, and there are bronze coins of 2 and 1 pfennige. The system is decimal; thus 100 pfennige = 1 mark, 1000 pfennige = the gold krone (or crown), and 1d. English amounts roughly to 8 pfennige.

Banking.—A new banking law was promulgated for the whole empire on the 14th of March 1875. Before that date there existed thirty-two banks with the privilege of issuing notes, and on the 31st of December 1872, £67,100,000 in all was in circulation, £25,100,000 of that sum being uncovered. The banking law was designed to reduce this circulation of notes; £19,250,000 was fixed as an aggregate maximum of uncovered notes of the banks. The private banks were at the same time obliged to erect branch offices in Berlin or Frankfort-on-Main for the payment of their notes. In consequence of this regulation numerous banks resigned the privilege of issuing notes, and at present there are in Germany but the following private note banks, issuing private notes, viz. the Bavarian, the Saxon, the Württemberg, the Baden and the Brunswick, in addition to the Imperial Bank. The Imperial Bank (Reichsbank) ranks far above the others in importance. It took the place of the Prussian Bank in 1876, and is under the superintendence and management of the empire, which shares in the profits. Its head office is in Berlin, and it is entitled to erect branch offices in any part of the empire. It has a capital of £9,000,000 divided into 40,000 shares of £150 each, and 60,000 shares of £50 each. The Imperial Bank is privileged to issue bank-notes, which must be covered to the extent of 1s. 3d. in coined money, bullion or bank-notes, the remainder in bills at short sight. Of the net profits, a dividend of 3½% is first payable to the shareholders, 20% of the remainder is transferred to the reserve until this has reached a total of £3,000,000, and of the remainder again a quarter is apportioned to the shareholders and three-quarters falls to the imperial exchequer. If the net profits do not reach 3½%, the balance must be made good from the reserve. Private note banks are not empowered to do business outside the state which has conceded them the privilege to issue notes, except under certain limitations. One of these is that they agree that their privilege to issue private notes may be withdrawn at one year’s notice without compensation. But this condition has not been enforced in the case of such banks as have agreed to accept as binding the official rate of discount of the Reichsbank after this has reached or when it exceeds 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 ⅛% below that rate.

The following table shows the financial condition of the note-issuing banks, in thousands of marks, over a term of years:

Liabilities.

Year.	Banks.	Capital.	Reserve.	Notes in Circulation.	Total, including other Liabilities.
1900	8	219,672	48,329	1,313,855	2,237,017
1901	7	231,672	54,901	1,345,436	2,360,453
1902	6	216,000	56,684	1,373,482	2,353,951
1903	6	216,000	60,131	1,394,336	2,365,256
1904	6	216,000	64,385	1,433,421	2,378,845

Assets.

Year.	Banks.	Coin and Bullion.	Notes of State and other Banks.	Bills.	Total.
1900	8	899,630	51,931	1,036,961	2,239,564
1901	7	990,262	60,770	990,950	2,360,355
1902	6	1,052,391	54,389	901,408	2,354,253
1903	6	973,953	54,231	984,604	2,356,511
1904	6	996,601	66,372	947,358	2,379,234

The total turnover of the Imperial Bank was, in the first year of its foundation, 1¾ milliards pounds sterling; and, in 1899, 90 milliards. Eighty-five per cent of its bank-notes have been, on the average, covered by metal reserve.

The total value of silver coins is not to exceed 10 marks, and that of copper and nickel 2½ marks per head of the population. While the coinage of silver, nickel and copper is reserved to the state, the coinage of gold pieces can be undertaken by the state for the account of private individuals on payment of a fixed charge. The coinage takes place in the six mints belonging to the various states—thus Berlin (Prussia), Munich (Bavaria), Dresden (in the Muldenerhütte near Freiberg, Saxony), Stuttgart (Württemberg), Karlsruhe (Baden) and Hamburg (for the state of Hamburg). Of the thalers, the Vereinsthaler, coined until 1867 in Austria, was by ordinance of the Bundesrat declared illegal tender since the 1st of January 1903. No one can be compelled to accept more than 20 marks in silver or more than 1 mark in nickel and copper coin; but, on the other hand, the Imperial Bank accepts imperial silver coin in payment to any amount.

The total value of thalers, which, with the exception of the Vereinsthaler, are legal tender, was estimated in 1894 at about £20,000,000.

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Archaeology

From an archaeological point of view Germany is very far from being a homogeneous whole. Not only has the development of the south differed from that of the north, and the west been subjected to other influences than those affecting the east, but even where the same influences have been at work the period of their operation has often varied widely in the different districts, so that in a general sketch of the whole country the chronology can only be a very rough approximation. In this article the dates assigned to the various periods in south Germany are those given by Sophus Müller, on the lines first laid down by Montelius. As regards north Germany, Müller puts the Northern Bronze age 500 years later than the Southern, but a recent find in Sweden bears out Montelius's view that southern influence made itself rapidly felt in the North. The conclusions of Montelius and Müller are disputed by W. Ridgeway, who maintains that the Iron age originated in central Europe, and that iron must consequently have been worked in those regions as far back as *c.* 2000 B.C.

Older Palaeolithic Period.—The earliest traces of man's handiwork are found either at the end of the pre-Glacial epoch, or in an inter-Glacial period, but it is a disputed point whether the latter is the first of a series of such periods. A typical German find is at Taubach, near Weimar, where almond-shaped stone wedges, small flint knives, and roughly-hacked pieces of porphyry and quartz are found, together with the remains of elephants. There are also bone implements, which are not found in the earliest periods in France.

Palaeolithic Transition Period (*Solutré*).—More highly developed forms are found when the mammoth has succeeded the elephant. Implements of chipped stone for the purposes of boring and scraping suggest that man worked hides for clothing. Ornaments of perforated teeth and shells are found.

Later Palaeolithic Period (*La Madeleine*).—The next period is marked by the presence of reindeer. In the Hohlefels in the Swabian Achthal there is still no trace of earthenware, and we find the skull of a reindeer skilfully turned into a drinking-vessel. Saws, needles, awls and bone harpoons are found. It is to be noticed that none of the German finds (mostly in the south and west) show any traces of the highly developed artistic sense so characteristic of the dwellers in France at this period.

The gap in our knowledge of the development of Palaeolithic into Neolithic civilization has recently been partially filled in by discoveries in north Germany and France of objects showing rather more developed forms than those of the former period, but still unaccompanied by earthenware. It is a disputed point whether the introduction of Neolithic civilization is due to a new ethnological element.

Neolithic Age (in south Germany till *c.* 2000 B.C.).—Neolithic man lived under the same climatic conditions as prevail to-day, but amidst forests of fir. He shows advance in every direction, and by the end of the later Neolithic period he is master of the arts of pottery and spinning, is engaged in agricultural pursuits, owns domestic animals, and makes weapons and tools of fine shape, either ground and polished or beautifully chipped. Traces of Neolithic settlements have been found chiefly in the neighbourhood of Worms, in the Main district and in Thuringia. These dwellings are usually holes in the ground, and presumably had thatched roofs. Our knowledge of the later Neolithic age, as of the succeeding periods, is largely gained from the remains of lake-dwellings, represented in Germany chiefly by Bavarian finds. The lake-dwellings in Mecklenburg, Pomerania and East Prussia are of a different type, and it is not certain that they date back to the Stone age. Typical Neolithic cemeteries are found at Hinkelstein, Alzey and other places in the neighbourhood of Worms. In these graves the skeletons lie flat, while in other cemeteries, as at Flomborn in Rhine-Hessen, and near Heilbronn, they are in a huddled position (hence the name *Hockergräber*). Necklaces and bracelets of Mediterranean shells point to a considerable amount of commerce. Other objects found in the graves are small flint knives, stone axes, flint and lumps of pyrites for obtaining fire, and, in the women's graves, hand-mills for grinding corn. The earthenware vessels usually have rounded bottoms. The earliest ornamentation consists of finger-imprints. Later we find two periods of zigzag designs in south Germany with an intermediate stage of spirals and wavy lines, while in north and east Germany the so-called string-ornamentation predominates. Towards the end of the period the inhabitants of north Germany erect megalithic graves, and in Hanover especially the passage-graves.

Bronze Age (in south Germany from *c.* 2000-1000 B.C.).—In the later Stone age we note the occasional use of copper, and then the gradual appearance of bronze. The bronze civilization of the Aegean seems to have had direct influence along the basins of the Danube and Elbe, while the culture of the western parts of central Germany was transmitted through Italy and France. No doubt the pre-eminence of the north, and especially of Denmark, at this period, was due to the amber trade, causing southern influence to penetrate up the basin of the Elbe to Jutland. The earlier period is characterized by the practice of inhumation in barrows made of clays, stones or sand, according to the district. Bronze is cast, whereas at a later time it shows signs of the hammer. From the finds in Bavarian graves it appears that the chief weapons were the dagger and the long pointed *Palstab* (palstave), while a short dagger fixed like an axe on a long shaft is characteristic of the North. The women wore two bronze pins, a bracelet on each arm, amber ornaments and a necklace of bronze tubes in spirals. One or two vases are found in each barrow, ornamented with finger-imprints, "string" decoration, &c. The later period is characterized by the practice of cremation, though the remains are still placed in barrows. Swords make their appearance. The women wear more and more massive ornaments. The vases are highly polished and of elegant form, with zigzag decoration.

Hallstatt Period (in Germany 8th-5th century B.C.).—The Hallstatt stage of culture, named after the famous cemetery in upper Austria, is marked by the introduction of iron (see HALLSTATT). In Germany its centre is Bavaria, Baden and Württemberg, with the Thuringian forest as the northern boundary. In Brandenburg, Lusatia, Silesia, Posen and Saxony, where

there was no strong Bronze age tradition, Hallstatt influence is very noticeable. In west Prussia the urns with human faces deserve notice. The dead are either buried in barrows or cremated, the latter especially in north and east Germany. In Bavaria both practices are resorted to, as at Hallstatt. The pottery develops beautiful form and colour. Fibulae, often of the "kettle-drum" form, take the place of the Bronze age pin.

La Tène Period (4th-1st century B.C.).—Down to this time there is very little evidence concerning the racial affinities of the population. When our records first begin the western and southern portions of Germany seem to have been inhabited by Celtic peoples (see below "Ethnography"). La Tène, in Switzerland, has given its name to the period, of which the earlier part corresponds to the time of Celtic supremacy. It is interesting to note how the Celts absorb Roman and still more Greek culture, even imitating foreign coins, and pass on their new arts to their Teutonic neighbours; but in spite of the strong foreign influence the Celtic civilization can in some sort be termed national. Later it has a less rich development, betraying the political decay of the race. Its centres in Germany are the southern districts as far as Thuringia, and the valleys of the Main and Saar. The ornamentation is of the conventionalized plant type: gold is freely used, and enamel, of a kind different from the Roman enamel used later in Germany, is applied to weapons and ornaments. Chariots are used in war, and fortified towns are built, though we must still suppose the houses to have consisted of a wooden framework coated with clay. In these districts La Tène influence is contemporary with the use of tumuli, but in the (non-Celtic) coast districts it must be sought in urn-cemeteries.

Roman Period (from the 1st century A.D.).—The period succeeding to La Tène ought rather to be called Romano-Germanic, the relation of the Teutonic races to the Roman civilization being much the same as that of the Celts to classical culture in the preceding period. The Rhine lands were of course the centre of Roman civilization, with Roman roads, fortresses, stone and tiled houses and marble temples. By this time the Teutonic peoples had probably acquired the art of writing, though the origin of their national (Runic) alphabet is still disputed. The graves of the period contain urns of earthenware or glass, cremation being the prevalent practice, and the objects found include one or more coins in accordance with Roman usage.

Period of National Migrations (A.D. 300-500).—The grave-finds do not bear out the picture of a period of ceaseless war painted by the Roman historians. On the contrary, weapons are seldom found, at any rate in graves, the objects in which bear witness to a life of extraordinary luxury. Magnificent drinking-vessels, beautifully ornamented dice and draughtsmen, masses of gay beads, are among the commonest grave-finds. A peculiarity of the period is the development of decoration inspired by animal forms, but becoming more and more tortuous and fantastic. Only those eastern parts of Germany which were now occupied by Slavonic peoples remained uninfluenced by this rich civilization.

The Merovingian Period (A.D. 500-800) sees the completion of the work of converting the German tribes to Christianity. *Reihengräber*, containing objects of value, but otherwise like modern cemeteries, with the dead buried in rows (*Reihen*), are found over all the Teutonic part of Germany, but some tribes, notably the Alamanni, seem still to have buried their dead in barrows. Among the Franks and Burgundians we find monolithic sarcophagi in imitation of the Romans, and in other districts sarcophagi were constructed out of several blocks of stone—the so-called *Plattengräber*. The weapons are the *spatha*, or double-bladed German sword, the *sax* (a short sword, or long knife, *semispathium*), the knife, shield, and the favourite German axe, though this latter is not found in Bavaria. The ornaments are beads, earrings, brooches, rings, bracelets, &c., thickly studded with precious stones.

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(B. S. P.)

Our direct knowledge of Germany begins with the appointment of Julius Caesar as governor of Gaul in 59 B.C. Long before that time there is evidence of German communication with southern civilization, as the antiquities prove, and occasional travellers from the Mediterranean had made their way into those regions (*e.g.* Pytheas, towards the end of the 4th century), but hardly any records of their journeys survive. The first Teutonic peoples whom the Romans are said to have encountered are the Cimbri and Teutoni, probably from Denmark, who invaded Illyria, Gaul and Italy towards the end of the 2nd century B.C. When Caesar arrived in Gaul the westernmost part of what is now Germany was in the possession of Gaulish tribes. The Rhine practically formed the boundary between Gauls and Germans, though one Gaulish tribe, the Menapii, is said to have been living beyond the Rhine at its mouth, and shortly before the arrival of Caesar an invading force of Germans had seized and settled down in what is now Alsace, 72 B.C. At this time the Gauls were being pressed by the Germans along the whole frontier, and several of Caesar's campaigns were occupied with operations, either against the Germans, or against Gaulish tribes set in motion by the Germans. Among these we may mention the campaign of his first year of office, 58 B.C., against the German king Ariovistus, who led the movement in Alsace, and that of 55 B.C. in which he expelled the Usipetes and Tencteri who had crossed the lower Rhine. During the period of Caesar's government he succeeded in annexing the whole of Gaul as far as the Rhine. (For the campaigns see Caesar, Julius.)

Julius Caesar in Germany.

After peace had been established in Italy by Augustus, attempts were made to extend the Roman frontier beyond the Rhine. The Roman prince Nero Claudius Drusus (*q.v.*) in the year 12 B.C. annexed what is now the kingdom of the Netherlands, and constructed a canal (Fossa Drusiana) between the Rhine and the lake Flevo (Lacus Flevus), which partly corresponded to the Zuyder Zee, though the topography of the district has greatly altered. He also penetrated into regions beyond and crossed the Weser, receiving the submission of the Bructeri, Chatti and Cherusci. After Drusus' death in 9 B.C., while on his return from an expedition which reached the Elbe, the German command was twice undertaken by Tiberius, who in A.D. 5 received the submission of all the tribes in this quarter, including the Chauci and the Langobardi. A Roman garrison was left in the conquered districts between the Rhine and the Elbe, but the reduction was not thoroughly completed. About the same time the Roman fleet voyaged along the northern coast apparently as far as the north of Jutland, and received the nominal submission of several tribes in that region, including the Cimbri and the Charudes. In A.D. 9 Quintilius Varus, the successor of Tiberius, was surprised in the *Saltus Teutobergensis* between the Lippe and the Weser by a force raised by Arminius, a chief of the Cherusci, and his army consisting of three legions was annihilated. Germanicus Caesar, during his tenure of the command of the Roman armies on the Rhine, made repeated attempts to recover the Roman position in northern Germany and exact vengeance for the death of Varus, but without real success, and after his recall the Rhine formed for the greater part of its course the boundary of the Empire. A standing army was kept up on the Rhine, divided into two commands, upper and lower Germany, the headquarters of the former being at Mainz, those of the latter at Vetera, near Xanten. A number of important towns grew up, among which we may mention Trier (Augusta Trevirorum), Cologne (Colonia Agrippinensis), Bonn (Bonna), Worms (Borbetomagus), Spires (Noviomagus), Strassburg (Argentoratum) and Augsburg (Augusta Vindelicorum).

The campaign of other Roman leaders.

At a later date, however, probably under the Flavian emperors, the frontier of upper Germany was advanced somewhat beyond the Rhine, and a fortification, the *Pfahlgraben*, constructed to protect it. It led from Hönningen on the Rhine, about half-way between Bonn and Coblenz, to Mittenberg above Aschaffenburg on the Main, thence southwards to Lorch in Württemberg, whence it turned east to the junction of the Altmühl with the Danube at Kelheim.

During the wars of Drusus, Tiberius and Germanicus the Romans had ample opportunity of getting to know the tribal geography of Germany, especially the western part, and though most of our authorities lived at a somewhat later period, it is probable that they derived their information very largely from records of that time. It will be convenient, therefore, to give an account of the tribal geography of Germany in the time of Augustus, as our knowledge of the subject is much more complete for his reign than for several centuries later.

Of the Gaulish tribes west of the Rhine, the most important was the Treveri, inhabiting the basin of the Moselle, from whom the city of Trier (Trèves) derives its name. The Rauraci probably occupied the south of Alsace. To the south of the Treveri lay the Mediomatrici, and to the west of them lay the important tribe of the Sequani, who had called in Ariovistus. The Treveri claimed to be of German origin, and

The German tribes.

the same claim was made by a number of tribes in Belgium, the most powerful of which were the Nervii. The meaning of this claim is not quite clear, as there is some obscurity concerning the origin of the name Germani. It appears to be a Gaulish term, and there is no evidence that it was ever used by the Germans themselves. According to Tacitus it was first applied to the Tungri, whereas Caesar records that four Belgic tribes, namely, the Condrusi, Eburones, Caeraesi and Paemani, were collectively known as Germani. There is no doubt that these tribes were all linguistically Celtic, and it is now the prevailing opinion that they were not of German origin ethnologically, but that the ground for their claim was that they had come from over the Rhine (cf. Caesar, *De Bello Gallico* ii. 4). It would therefore seem that the name Germani originally denoted certain Celtic tribes to the east of the Rhine, and that it was then transferred to the Teutonic tribes which subsequently occupied the same territory.

There is little doubt that during the last century before the Christian era the Celtic peoples had been pushed considerably farther west by the Teutonic peoples, a process which was still going on in Caesar's time, when we hear of the overthrow of the Menapii, the last Gaulish tribe beyond the Rhine. In the south the same process can be observed. The Boii were expelled from their territories in Bohemia by the Marcomanni in the time of Augustus, and the Helvetii are also recorded to have occupied formerly lands east of the Rhine, in what is now Baden and Württemberg. Caesar also mentions a Gaulish tribe named Volcae Tectosages as living in Germany in his time. The Volcae Arecomici in the south of France and the Tectosages of Galatia were in all probability offshoots of this people. The name of the tribe was adopted in the Teutonic languages as a generic term for all Celtic and Italian peoples (O.H.G. *Walha*, A.S. *Wealas*), from which it is probably to be inferred that they were the Celtic people with whom the Teutonic races had the closest association in early times. It has been thought that they inhabited the basin of the Weser, and a number of place-names in this district are supposed to be of Celtic origin. Farther to the south and west Ptolemy mentions a number of place-names which are certainly Celtic, *e.g.* Mediolanion, Aregelia, Lougidounon, Lokoriton, Segodounon. There is therefore great probability that a large part of western Germany east of the Rhine had formerly been occupied by Celtic peoples. In the east a Gaulish people named Cotini are mentioned, apparently in the upper basin of the Oder, and Tacitus speaks of a tribe in the same neighbourhood, the Osi, who he says spoke the Pannonian language. It is probable, therefore, that in other directions also the Germans had considerably advanced their frontier southwards at a comparatively recent period.

Their movements.

Coming now to the Germans proper, the basin of the Rhine between Strassburg and Mainz was inhabited by the Tribocci, Nemetes and Vangiones, farther down by the Mattiaci about Wiesbaden, and the Ubii in the neighbourhood of Cologne; beyond them were the Sugambri, and in the Rhine delta the Batavi and other smaller tribes. All these tribes remained in subjection to the Romans. Beyond them were the Tencteri, probably about the basin of the Lahn, and the Usipetes about the basin of the Ruhr. The basin of the Lippe and the upper basin of the Ems were inhabited by the Bructeri, and in the same neighbourhood were the Ampsivarii, who derive their name from the latter river. East of them lay the Chasuarii, presumably in the basin of the Hase. The upper basin of the Weser was inhabited by the Chatti, whose capital was Mattium, supposed to be Maden on the Eder. To the north-west of them were situated the Marsi, apparently between the Diemel and the Lippe, while the central part of the basin of the Weser was inhabited by the Cherusci, who seem to have extended considerably eastward. The lower part of the river-basin was inhabited by the Angrivarii. The coastlands north of the mouth of the Rhine were occupied by the Canninefates, beyond them by the Frisii as far as the mouth of the Ems, thence onward to the mouth of the Elbe by the Chauci. As to the affinities of all these various tribes we have little definite information, but it is worth noting that the Batavi in Holland are said to have been a branch of the Chatti, from whom they had separated owing to a *seditio domestica*. The basin of the Elbe was inhabited by Suebic tribes, the chief of which were the Marcomanni, who seem to have been settled on the Saale during the latter part of the 1st century B.C., but moved into Bohemia before the beginning of the Christian era, where they at once became a formidable power under their king Maroboduus. The Quadi were settled somewhat farther east about the source of the Elbe. The Hermunduri in the basin of the Saale were in alliance with the Romans and occupied northern Bavaria with their consent. The Semnones apparently dwelt below the junction of the Saale and Elbe. The Langobardi (see LOMBARDS) possessed the land between the territory of the Semnones and the mouth of the river. Their name is supposed to be preserved in Bardengau, south of Hamburg. From later evidence it is likely that another division of the Suebi inhabited western Holstein. The province of Schleswig (perhaps only the west coast) and the islands adjacent were inhabited by the Saxons, while the east coast, at least in later times, was occupied by the Angli. The coast of Mecklenburg was probably inhabited by the Varini (the later Warni). The eastern part of

Tribes in the west and north.

Germany was much less known to the Romans, information being particularly deficient as to the populations of the coast districts, though it seems probable that the Rugii inhabited the eastern part of Pomerania, where a trace of them is preserved in the name Rügenwalde. The lower part of the basin of the Oder was probably occupied by the Burgundiones, and the upper part by a number of tribes collectively known as Lugii, who seem to correspond to the Vandals of later times, though the early Roman writers apparently used the word Vandilii in a wider sense, embracing all the tribes of eastern Germany. Among the Lugii we may probably include the Silingae, who afterwards appear among the Vandals in Spain, and whose name is preserved in Slavonic form in that of the province Silesia. The Goths (Gotones) apparently inhabited the basin of the Vistula about the middle of its course, but the lower part of the basin was inhabited by non-Teutonic peoples, among whom we may mention the Galindi, probably Prussians, and the Aestii, either Prussian or Esthonian, in the coastlands at the mouth of the river, who are known especially in connexion with the amber trade. To the east of the Vistula were the Slavonic tribes (Veneti), and amongst them, perhaps rather to the north, a Finnish population (Fenni), which disappeared in later times.

Domestic wars of the Germans.

In the time of Augustus by far the most powerful ruler in Germany was Maroboduus, king of the Marcomanni. His supremacy extended over all the Suebic tribes (except perhaps the Hermunduri), and most of the peoples of eastern Germany, including apparently the Lugii and Goths. But in the year A.D. 17 he became involved in an unsuccessful campaign against Arminius, prince of the Cherusci, in which the Semnones and Langobardi revolted against him, and two years later he was deprived of his throne by a certain Catualda. The latter, however, was soon expelled by Vibilius, king of the Hermunduri, and his power was transferred to Vannius, who belonged to the Quadi. About the same time Arminius met his death while trying to make himself king of the Cherusci. In the year 28 the Frisians revolted from the Romans, and though 831
they submitted again in the year 47, Claudius immediately afterwards recalled the Roman troops to the left bank of the Rhine. In the year 50 Vannius, king of the Suebi, was driven from the throne by Vibilius, king of the Hermunduri, and his nephews Vangio and Sido obtained his kingdom. In the year 58 the Chatti suffered a serious disaster in a campaign against the Hermunduri. They seem, however, to have recovered very soon, and at the end of the 1st century had apparently extended their power at the expense of the Cherusci. During the latter part of the 1st century the Chauci seem to have been enlarging their territories: as early as the year 47 we find them raiding the Roman lands on the lower Rhine, and in 58 they expelled the Ampsivarii, who after several vain attempts to acquire new possessions were annihilated by the neighbouring tribes. During the last years of the 1st century the Angrivarii are found moving westwards, probably under pressure from the Chauci, and the power of the Bructeri was almost destroyed by their attack. In 69 the Roman territory on the lower Rhine was disturbed by the serious revolt of Claudius Civilis, a prince of the Batavi who had served in the Roman army. He was joined by the Bructeri and other neighbouring tribes, but being defeated by Petilius Cerealis (afterwards consular legate in Britain) at Vetera and in other engagements gave up the struggle and arranged a capitulation in A.D. 70. By the end of the 1st century the Chauci and Chatti seem to have become by far the most powerful tribes in western Germany, though the former are seldom mentioned after this time.

After the time of Tacitus our information regarding German affairs becomes extremely meagre. The next important conflict with the Romans was the Marcomannic War (166-180), in which all the Suebic tribes together with the Vandals (apparently the ancient Lugii) and the Sarmatian Iazyges seem to have taken part. Peace was made by the emperor Commodus in A.D. 180 on payment of large sums of money.

The Alamanni, the Goths and the Franks.

About the beginning of the 3rd century we find a forward movement in south-west Germany among a group of tribes known collectively as Alamanni (*q.v.*) who came in conflict with the emperor Caracalla in the year 213. About the same time the Goths also made their first appearance in the south-east and soon became the most formidable antagonists of Rome. In the year 251 they defeated and slew the emperor Decius, and in the reign of Gallienus their fleets setting out from the north of the Black Sea worked great havoc on the coast of the Aegean (see GOTHS). It is not to be supposed, however, that they had quitted their own lands on the Vistula by this time. In this connexion we hear also of the Heruli (*q.v.*), who some twenty years later, about 289, make their appearance in the western seas. In 286 we hear for the first time of maritime raids by the Saxons in the same quarter. About the middle of the 3rd century the name Franks (*q.v.*) makes its first appearance, apparently a new collective term for the tribes of north-west Germany from the Chatti to the mouth of the Rhine.

In the 4th century the chief powers in western Germany were the Franks and the Alamanni, both of whom were in constant conflict with the Romans. The former were pressed in their rear by the Saxons, who at some time before the middle of the 4th century appear to have invaded

Arrival of the Huns.

and conquered a considerable part of north-west Germany. About the same time great national movements seem to have been taking place farther east. The Burgundians made their appearance in the west shortly before the end of the 3rd century, settling in the basin of the Main, and it is probable that some portions of the north Suebic peoples, perhaps the ancient Semnones, had already moved westward. By the middle of the 4th century the Goths had become the dominant power in eastern Germany, and their King Hermanaric held a supremacy which seems to have stretched from the Black Sea to Holstein. At his death, however, the supremacy of eastern Germany passed to the Huns, an invading people from the east, whose arrival seems to have produced a complete displacement of population in this region. With regard to the course of events in eastern Germany we have no knowledge, but during the 5th century several of the peoples previously settled there appear to have made their way into the lands south of the Carpathians and Riesengebirge, amongst whom (besides the Goths) may be especially mentioned the Rugii and the Gepides, the latter perhaps originally a branch of the Goths. According to tradition the Vandals had been driven into Pannonia by the Goths in the time of Constantine. We do not know how far northward the Hunnish power reached in the time of Attila, but the invasion of this nation was soon followed by a great westward movement of the Slavs.

The Burgundians and other tribes.

In the west the Alamanni and the descendants of the Marcomanni, now called Baiouarii (Bavarians), had broken through the frontiers of the Roman provinces of Vindelicia and Noricum at the beginning of the 5th century, while the Vandals together with some of the Suebi and the non-Teutonic Alani from the east crossed the Rhine and invaded Gaul in 406. About 435-440 the Burgundians were overthrown by Attila, and their king Gunthacarius (Gundahar) killed. The remains of the nation shortly afterwards settled in Gaul. About the same time the Franks overran and occupied the modern Belgium, and in the course of the next half-century their dominions were enormously extended towards the south (see Franks). After the death of Attila in 453 the power of the Huns soon collapsed, but the political divisions of Germany in the ensuing period are far from clear.

The Franks and others in the 6th century.

In the 6th century the predominant peoples are the Franks, Frisians, Saxons, Alamanni, Bavarians, Langobardi, Heruli and Warni. By the beginning of this century the Saxons seem to have penetrated almost, if not quite, to the Rhine in the Netherlands. Farther south, however, the old land of the Chatti was included in the kingdom of Clovis. Northern Bavaria was occupied by the Franks, whose king Clovis subdued the Alamanni in 495. To the east of the Franks between the Harz, the Elbe and the Saale lay the kingdom of the Thuringi, the origin of whom is not clear. The Heruli also had a powerful kingdom, probably in the basin of the Elbe, and to the east of them were the Langobardi. The Warni apparently now dwelt in the regions about the mouth of the Elbe, while the whole coast from the mouth of the Weser to the west Scheldt was in the hands of the Frisians. By this time all the country east of the lower Elbe seems to have been Slavonic. In the north, perhaps in the province of Schleswig, we hear now for the first time of the Danes. Theodoric, king of the Ostrogoths, endeavoured to form a confederacy with the Thuringi, Heruli and Warni against Clovis in order to protect the Visigoths in the early years of the 6th century, but very shortly afterwards the king of the Heruli was slain by the Langobardi and their existence as an independent power came to an end. In 531 the Thuringian kingdom was destroyed by the Frankish king Theodoric, son of Clovis, with whom the Saxons were in alliance.

The Saxons and the Franks.

During the 6th and 7th centuries the Saxons were intermittently under Frankish supremacy, but their conquest was not complete until the time of Charlemagne. Shortly after the middle of the 6th century the Franks were threatened with a new invasion by the Avars. In 567-568 the Langobardi, who by this time had moved into the Danube basin, invaded Italy and were followed by those of the Saxons who had settled in Thuringia. Their lands were given by the Frankish king Sigeberht to the north Suebi and other tribes who had come either from the Elbe basin or possibly from the Netherlands. About the same time Sigeberht was defeated by the Avars, and though the latter soon withdrew from the Frankish frontiers, their course was followed by a movement of the Slavs, who occupied the basin of the Elster and penetrated to that of the Main.

By the end of the 6th century the whole basin of the Elbe except the Saxon territory near the mouth had probably become Slavonic. To the east of the Saale were the Sorbs (Sorabi), and beyond them the Daleminci and Siusli. To the east of the Saxons were the Polabs (Polabi) in the basin of the Elbe, and beyond them the Hevelli about the Havel. Farther north in Mecklenburg were the Warnabi, and in eastern Holstein the Obotriti and the Wagri. To the east of the Warnabi were the Liutici as far as the Oder, and beyond that river the Pomerani. To the south of the Oder were the Milcieni and the Lusici, and farther east the Poloni with their centre in

the basin of the Vistula. The lower part of the Vistula basin, however, was in possession of Prussian tribes, the Prussi and Lithuani.

The Warni now disappear from history, and from this time the Teutonic peoples of the north as far as the Danish boundary about the Eider are called Saxons. The conquest of the Frisians by the Franks was begun by Pippin (Pepin) of Heristal in 689 and practically completed by Charles Martel, though they were not entirely brought into subjection until the time of Charlemagne. The great overthrow of the Saxons took place about 772-773 and by the end of the century Charlemagne had extended his conquests to the border of the Danes. By this time the whole of the Teutonic part of Germany had been finally brought under his government.

AUTHORITIES.—Caesar, *De bello Gallico*, especially i. 31 ff., iv. 1-19, vi. 21 ff.; Velleius Paterculus, especially ii. 105 ff.; Strabo, especially pp. 193 ff., 290 ff.; Pliny, *Natural History*, iv. §§ 99 ff., 106; Tacitus, Annales, i. 38 ff., ii. 5 ff., 44 ff., 62 f., 88; *Germania*, passim; *Histories*, iv.; Ptolemy ii. 9, §§ 2 ff., 11, iii. 5, §§ 19 ff.; Dio Cassius, passim; Julius Capitolinus; Claudius Mamertinus; Ammianus Marcellinus, passim; Zosimus; Jordanes, *De origine Getarum*; Procopius, *De bello Gothico*; K. Zeuss, *Die Deutschen und die Nachbarstämme*; O. Bremer in Paul's *Grundriss d. germ. Philologie* (2nd ed.), vol. iii. pp. 735 ff.

(F. G. M. B.)

MEDIEVAL AND MODERN HISTORY

When Clovis, or Chlodovech, became king of a tribe of the Salian Franks in 481, five years after the fall of the Western empire, the region afterwards called Germany was divided into five main districts, and its history for the succeeding three centuries is mainly the history of the tribes inhabiting these districts. In the north-east, dwelling between the Rhine and the Elbe, were the Saxons (*q.v.*), to the east and south of whom stretched the extensive kingdom of Thuringia (*q.v.*). In the south-west the Alamanni occupied the territory afterwards called Swabia (*q.v.*), and extended along the middle Rhine until they met the Ripuarian Franks, then living in the northern part of the district which at a later period was called after them, Franconia (*q.v.*); and in the south-east were the Bavarians, although it was some time before their country came to be known as Bavaria (*q.v.*).

Divisions of Germany.

Clovis was descended from Chlogio, or Clodion, who had ruled over a branch of the Salian Franks from 427 to 447, and whose successors, following his example, had secured an influential position for their tribe. Having obtained possession of that part of Gaul which lay between the Seine and the Loire, Clovis turned his attention to his eastern neighbours, and was soon engaged in a struggle with the Alamanni which probably arose out of a quarrel between them and the Ripuarian Franks for the possession of the middle Rhine. When in 496, or soon afterwards, the Alamanni were defeated, they were confined to what was afterwards known as Swabia, and the northern part of their territory was incorporated with the kingdom of the Franks. Clovis had united the Salian Franks under his rule, and he persuaded, or compelled, the Ripuarian Franks also to accept him as their king; but on his death in 511 his kingdom was divided, and the Ripuarian, or Rhenish, Franks as they are sometimes called, together with some of the Alamanni, came under the rule of his eldest son Theuderich or Theodoric I. This was the first of the many partitions which effectually divided the kingdom of the Franks into an eastern and a western portion, that is to say, into divisions which eventually became Germany and France respectively, and the district ruled by Theuderich was almost identical with that which afterwards bore the name of Austrasia. In 531 Theuderich killed Hermannfried, king of the Thuringians, a former ally, with whom he had quarrelled, conquered his kingdom, and added its southern portion to his own possessions. His son and successor, Theudebert I., exercised a certain supremacy over the Alamanni and the Bavarians, and even claimed authority over various Saxon tribes between whom and the Franks there had been some fighting. After his death in 548, however, the Frankish power in Germany sank to very minute proportions, a result due partly to the spirit of tribal independence which lingered among the German races, but principally to the paralysing effect of the unceasing rivalry between Austrasia and Neustria. From 548 the Alamanni were ruled by a succession of dukes who soon made themselves independent; and in 555 a duke of the Bavarians, who exercised his authority without regard for the Frankish supremacy, is first mentioned. In Thuringia, which now only consisted of the central part of the former kingdom, King Dagobert I. set up in 634 a duke named Radulf who soon asserted his independence of Dagobert and of his successor, Sigebert III. The Saxons for their part did not own even a nominal allegiance to the Frankish kings, whose authority on the right bank of the Rhine was confined to the district actually occupied by men of their own name, which at a later date became the duchy of Franconia. During these years the eastern border of Germany was constantly ravaged by various Slavonic tribes. King Dagobert sent troops to repel these marauders from time to time, but the main burden of

The wars of Clovis.

defence fell upon the Saxons, Bavarians and Thuringians. The virtual independence of these German tribes lasted until the union of Austrasia and Neustria in 687, an achievement mainly due to the efforts of Pippin of Heristal, who soon became the actual, though not the nominal, ruler of the Frankish realm. Pippin and his son Charles Martel, who was mayor of the palace from 717 to 741, renewed the struggle with the Germans and were soon successful in re-establishing the central power which the Merovingian kings had allowed to slip from their grasp. The ducal office was abolished in Thuringia, a series of wars reduced the Alamanni to strict dependence, and both countries were governed by Frankish officials. Bavaria was brought into subjection about the same time; the Bavarian law, committed to writing between 739 and 748, strongly emphasizes the supremacy of the Frankish king, whose authority it recognizes as including the right to appoint and even to depose the duke of Bavaria. The Saxons, on the other hand, succeeded in retaining their independence as a race, although their country was ravaged in various campaigns and some tribes were compelled from time to time to pay tribute. The rule of Pippin the Short, both before and after his coronation as king, was troubled by constant risings on the part of his East Frankish or German subjects, but aided by his brother Carloman, who for a time administered this part of the Frankish kingdom, Pippin was generally able to deal with the rebels.

The Saxons remain independent.

After all, however, even these powerful Frankish conquerors had but imperfect success in Germany. When they were present with their formidable armies, they could command obedience; when engaged, as they often were, in distant parts of the vast Frankish territory, they could not trust to the fulfilment of the fair promises they had exacted. One of the chief causes of their ill-success was the continued independence of the Saxons. Ever since they had acquired the northern half of Thuringia, this warlike race had been extending its power. They were still heathens, cherishing bitter hatred towards the Franks, whom they regarded as the enemies both of their liberties and of their religion; and their hatred found expression, not only in expeditions into Frankish territory, but in help willingly rendered to every German confederation which wished to throw off the Frankish yoke. Hardly any rebellion against the dukes of the Franks, or against King Pippin, took place in Germany without the Saxons coming forward to aid the rebels. This was perfectly understood by the Frankish rulers, who tried again and again to put an end to the evil by subduing the Saxons. They could not, however, attain their object. An occasional victory was gained, and some border tribes were from time to time compelled to pay tribute; but the mass of the Saxons remained unconquered. This was partly due to the fact that the Saxons had not, like the other German confederations, a duke who, when beaten, could be held responsible for the engagements forced upon him as the representative of his subjects. A Saxon chief who made peace with the Franks could undertake nothing for the whole people. As a conquering race, they were firmly compact; conquered, they were in the hands of the victor a rope of sand.

Christianity in Germany.

It was during the time of Pippin of Heristal and his son and grandson that the conversion of the Germans to Christianity was mainly effected. Some traces of Roman Christianity still lingered in the Rhine valley and in southern Germany, but the bulk of the people were heathen, in spite of the efforts of Frank and Irish missionaries and the command of King Dagobert I. that all his subjects should be baptized. Rupert, bishop of Worms, had already made some progress in the work of converting the Bavarians and Alamanni, as had Willibrord among the Thuringians when St Boniface appeared in Germany in 717. Appointed bishop of the Germans by Pope Gregory II., and supported by Charles Martel, he preached with much success in Bavaria and Thuringia, notwithstanding some hostility from the clergy who disliked the influence of Rome. He founded or restored bishoprics in Bavaria, Thuringia and elsewhere, and in 742 presided over the first German council. When he was martyred in 755 Christianity was professed by all the German races except the Saxons, and the church, organized and wealthy, had been to a large extent brought under the control of the papacy. The old pagan faith was not yet entirely destroyed, and traces of its influence may still be detected in popular beliefs and customs. But still Christianity was dominant, and soon became an important factor in the process of civilization, while the close alliance of the German church with the papacy was followed by results of the utmost consequence for Germany.

The work of Charlemagne.

The reign of Charlemagne is a period of great importance in the history of Germany. Under his rule the first signs of national unity and a serious advance in the progress of order and civilization may be seen. The long struggle, which ended in 804 with the submission of the Saxons to the emperor, together with the extension of a real Frankish authority over the Bavarians, brought the German races for the first time under a single ruler; while war and government, law and religion, alike tended to weld them into one people. The armies of Charlemagne contained warriors from all parts of Germany; and although tribal law was respected and codified, legislation common to the whole empire was also introduced. The general establishment of the Frankish system of

government and the presence of Frankish officials helped to break down the barriers of race, and the influence of Christianity was in the same direction. With the conversion of the Saxons the whole German race became nominally Christian; and their ruler was lavish in granting lands and privileges to prelates, and untiring in founding bishoprics, monasteries and schools. Measures were also taken for the security and good government of the country. Campaigns against the Slavonic tribes, if sometimes failing in their immediate object, taught those peoples to respect the power of the Frankish monarch; and the establishment of a series of marches along the eastern frontier gave a sense of safety to the neighbouring districts. The tribal dukes had all disappeared, and their duchies were split up into districts ruled by counts (*q.v.*), whose tendencies to independence the emperor tried to check by the visits of the *missi dominici* (*q.v.*). Some of the results of the government of Charlemagne were, however, less beneficial. His coronation as Roman emperor in 800, although it did not produce at the time so powerful an impression in Germany as in France, was fraught with consequences not always favourable for the former country. The tendencies of the tribe to independence were crushed as their ancient popular assemblies were discouraged; and the liberty of the freemen was curtailed owing to the exigencies of military service, while the power of the church was rarely directed to the highest ends.

Louis I. and his sons.

The reign of the emperor Louis I. was marked by a number of abortive schemes for the partition of his dominions among his sons, which provoked a state of strife that was largely responsible for the increasing weakness of the Empire. The mild nature of his rule, however, made Louis popular with his German subjects, to whose support mainly he owed his restoration to power on two occasions. When in 825 his son Louis, afterwards called “the German,” was entrusted with the government of Bavaria and from this centre gradually extended his authority over the Carolingian dominions east of the Rhine, a step was taken in the process by which East Francia, or Germany, was becoming a unit distinguishable from other portions of the Empire; a process which was carried further by the treaty of Verdun in August 843, when, after a struggle between Louis the German and his brothers for their father’s inheritance, an arrangement was made by which Louis obtained the bulk of the lands east of the Rhine together with the districts around Mainz, Worms and Spires on the left bank. Although not yet a single people, the German tribes had now for the first time a ruler whose authority was confined to their own lands, and from this time the beginnings of national life may be traced. For fifty years the main efforts of Louis were directed to defending his kingdom from the inroads of his Slavonic neighbours, and his detachment from the rest of the Empire necessitated by these constant engagements towards the east, gradually gave both him and his subjects a distinctive character, which was displayed and emphasized when, in ratifying an alliance with his half-brother, the West-Frankish king, Charles the Bald, the oath was sworn in different tongues. The East and West Franks were unable to understand each other’s speech, so Charles took the oath in a Romance, and Louis in a German dialect.

Louis the German and his successors.

Important as is the treaty of Verdun in German history, that of Mersen, by which Louis and Charles the Bald settled in 870 their dispute over the kingdom of Lothair, second son of the emperor Lothair I., is still more important. The additional territory which Louis then obtained gave to his dominions almost the proportions which Germany maintained throughout the middle ages. They were bounded on the east by the Elbe and the Bohemian mountains, and on the west beyond the Rhine they included the districts known afterwards as Alsace and Lorraine. His jurisdiction embraced the territories occupied by the five ancient German tribes, and included the five archbishoprics of Mainz, Treves (Trier), Cologne, Salzburg and Bremen. When Louis died in 876 his kingdom was divided among his three sons, but as the two elder of these soon died without heirs, Germany was again united in 882 under his remaining son Charles, called “the Fat,” who soon became ruler of almost the whole of the extensive domains of Charlemagne. There was, however, no cohesion in the restored empire, the disintegration of which, moreover, was hastened by the ravages of the Northmen, who plundered the cities in the valley of the Rhine. Charles attempted to buy off these redoubtable invaders, a policy which aroused the anger of his German subjects, whose resentment was accentuated by the king’s indifference to their condition, and found expression in 887 when Arnulf, an illegitimate son of Carloman, the eldest son of Louis the German, led an army of Bavarians against him. Arnulf himself was recognized as German or East-Frankish king, although his actual authority was confined to Bavaria and its neighbourhood. He was successful in freeing his kingdom for a time from the ravages of the Northmen, but was not equally fortunate in his contests with the Moravians. After his death in 899 his kingdom came under the nominal rule of his young son Louis “the Child,” and in the absence of firm rule and a central authority became the prey of the Magyars and other hordes of invaders.

During these wars feudalism made rapid advance in Germany. The different peoples compelled to attend to their own defence appointed dukes for special military services (see

DUKE); and these dukes, chosen often from members of the old ducal families, succeeded without much difficulty in securing a more permanent position for themselves and their descendants. In Saxony, for example, we hear of Duke Otto the Illustrious, who also ruled over Thuringia; and during the early years of the 10th century dukes appear in Franconia, Bavaria, Swabia and Lorraine. These dukes acquired large tracts of land of which they gave grants on conditions of military service to persons on whom they could rely; while many independent landowners sought their protection on terms of vassalage. The same process took place in the case of great numbers of freemen of a lower class, who put themselves at the service of their more powerful neighbours in return for protection. In this manner the feudal tenure of land began to prevail in almost all parts of Germany, and the elaborate social system which became known as feudalism was gradually built up. The dukes became virtually independent, and when Louis the Child died in 911, the royal authority existed in name only.

Feudalism in Germany.

While Louis the Child lived the German dukes were virtually kings in their duchies, and their natural tendency was to make themselves absolute rulers. But, threatened as they were by the Magyars, with the Slavs and Northmen always ready to take advantage of their weakness, they could not afford to do without a central government. Accordingly the nobles assembled at Forchheim, and by the advice of Otto the Illustrious, duke of Saxony, Conrad of Franconia was chosen German king. The dukes of Bavaria, Swabia and Lorraine were displeased at this election, probably because Conrad was likely to prove considerably more powerful than they wished. Rather than acknowledge him, the duke of Lotharingia, or Lorraine, transferred his allegiance to Charles the Simple of France; and it was in vain that Conrad protested and despatched armies into Lorraine. With the help of the French king the duke maintained his ground, and for the time his country was lost to Germany. Bavaria and Swabia yielded, but, mainly through the fault of the king himself, their submission was of brief duration. The rise of the dukes had been watched with extreme jealousy by the leading prelates. They saw that the independence they had hitherto enjoyed would be much more imperilled by powerful local governors than by a sovereign who necessarily regarded it as part of his duty to protect the church. Hence they had done everything they could to prevent the dukes from extending their authority, and as the government was carried on during the reign of Louis the Child mainly by Hatto I., archbishop of Mainz, they had been able to throw considerable obstacles in the way of their rivals. They had now induced Conrad to quarrel with both Swabia and Bavaria, and also with Henry, duke of Saxony, son of the duke to whom he chiefly owed his crown. In these contests the German king met with indifferent success, but the struggle with Saxony was not very serious, and when dying in December 919 Conrad recommended the Franconian nobles to offer the crown to Henry, the only man who could cope with the anarchy by which he had himself been baffled.

Conrad I.

The nobles of Franconia acted upon the advice of their king, and the Saxons were very willing that their duke should rise to still higher honours. Henry I., called “the Fowler,” who was chosen German king in May 919, was one of the best of German kings, and was a born statesman and warrior. His ambition was of the noblest order, for he sank his personal interests in the cause of his country, and he knew exactly when to attain his objects by force, and when by concession and moderation. Almost immediately he overcame the opposition of the dukes of Swabia and Bavaria; some time later, taking advantage of the troubled state of France, he accepted the homage of the duke of Lorraine, which for many centuries afterwards remained a part of the German kingdom.

Henry the Fowler.

Having established internal order, Henry was able to turn to matters of more pressing moment. In the first year of his reign the Magyars, who had continued to scourge Germany during the reign of Conrad, broke into Saxony and plundered the land almost without hindrance. In 924 they returned, and this time by good fortune one of their greatest princes fell into the hands of the Germans. Henry restored him to his countrymen on condition that they made a truce for nine years; and he promised to pay yearly tribute during this period. The barbarians accepted his terms, and faithfully kept their word in regard to Henry’s own lands, although Bavaria, Swabia and Franconia they occasionally invaded as before. The king made admirable use of the opportunity he had secured, confining his efforts, however, to Saxony and Thuringia, the only parts of Germany over which he had any control.

Henry and the Magyars.

In the southern and western German lands towns and fortified places had long existed; but in the north, where Roman influence had only been feeble, and where even the Franks had not exercised much authority until the time of Charlemagne, the people still lived as in ancient times, either on solitary farms or in exposed villages. Henry saw that, while this state of things lasted, the population could never be safe, and began the construction of fortresses and walled towns. Of every group of nine

Henry’s work in Saxony.

men one was compelled to devote himself to this work, while the remaining eight cultivated his fields and allowed a third of their produce to be stored against times of trouble. The necessities of military discipline were also a subject of attention. Hitherto the Germans had fought mainly on foot, and, as the Magyars came on horseback, the nation was placed at an immense disadvantage. A powerful force of cavalry was now raised, while at the same time the infantry were drilled in new and more effective modes of fighting. Although these preparations were carried on directly under Henry's supervision, only in Saxony and Thuringia the neighbouring dukes were stimulated to follow his example. When he was ready he used his new troops, before turning them against their chief enemy, the Magyars, to punish refractory Slavonic tribes; and he brought under temporary subjection nearly all the Slavs between the Elbe and the Oder. He proceeded also against the Bohemians, whose duke was compelled to do homage.

The Magyars return.

The truce with the Magyars was not renewed, whereupon in 933 a body of invaders crossed, as in former years, the frontier of Thuringia. Henry prudently waited until dearth of provisions forced the enemy to divide into two bands. He then swept down upon the weaker force, annihilated it, and rapidly advanced against the remaining portion of the army. The second battle was more severe than the first, but not less decisive. The Magyars, unable to cope with a disciplined army, were cut down in great numbers, and those who survived rode in terror from the field. The exact scenes of these conflicts are not known, although the date of the second encounter was the 15th of March 933; but few more important battles have ever been fought. The power of the Magyars was not indeed destroyed, but it was crippled, and the way was prepared for the effective liberation of Germany from an intolerable plague. While the Magyars had been troubling Germany on the east and south, the Danes had been irritating her on the north. Charlemagne had established a march between the Eider and the Schlei; but in course of time the Danes had not only seized this territory, but had driven the German population beyond the Elbe. The Saxons had been slowly reconquering the lost ground, and now Henry, advancing with his victorious army into Jutland, forced Gorm, the Danish king, to become his vassal and regained the land between the Eider and the Schlei. But Henry's work concerned the duchy of Saxony rather than the kingdom of Germany. He concentrated all his energies on the government and defence of northern and eastern Germany, leaving the southern and western districts to profit by his example, while his policy of refraining from interference in the affairs of the other duchies tended to diminish the ill-feeling which existed between the various German tribes and to bring peace to the country as a whole. It is in these directions that the reign of Henry the Fowler marks a stage in the history of Germany.

The growth of towns.

When this great king died in July 936 every land inhabited by a German population formed part of the German kingdom, and none of the duchies were at war either with him or among themselves. Along the northern and eastern frontier were tributary races, and the country was for the time rid of an enemy which, for nearly a generation, had kept it in perpetual fear. Great as were these results, perhaps Henry did even greater service in beginning the growth of towns throughout north Germany. Not content with merely making them places of defence, he decreed that they should be centres for the administration of justice, and that in them should be held all public festivities and ceremonies; he also instituted markets, and encouraged traders to take advantage of the opportunities provided for them. A strong check was thus imposed upon the tendency of freemen to become the vassals of great lords. This movement had become so powerful by the troubles of the epoch that, had no other current of influence set in, the entire class of freemen must soon have disappeared. As they now knew that they could find protection without looking to a superior, they had less temptation to give up their independence, and many of them settled in the towns where they could be safe and free. Besides maintaining a manly spirit in the population, the towns rapidly added to their importance by the stimulus they gave to all kinds of industry and trade.

Otto the Great.

Before his death Henry obtained the promise of the nobles at a national assembly, or diet, at Erfurt to recognize his son Otto as his successor, and the promise was kept, Otto being chosen German king in July 936. Otto I. the Great began his reign under the most favourable circumstances. He was twenty-four years of age, and at the coronation festival, which was held at Aix-la-Chapelle, the dukes performed for the first time the nominally menial offices known as the arch-offices of the German kingdom. But these peaceful relations soon came to an end. Reversing his father's policy, Otto resolved that the dukes should act in the strictest sense as his vassals, or lose their dignities. At the time of his coronation Germany was virtually a federal state; he wished to transform it into a firm and compact monarchy. This policy speedily led to a formidable rebellion, headed by Thankmar, the king's half-brother, a fierce warrior, who fancied that he had a prior claim to the crown, and who secured a number of followers in Saxony. He was joined by Eberhard, duke of Franconia, and it was only by the aid of the duke of Swabia, whom the duke of Franconia had offended, that the rising was put down. This happened in 938, and

in 939 a second rebellion, led by Otto's brother Henry, was supported by the duke of Franconia and by Giselbert, duke of Lorraine. Otto again triumphed, and derived immense advantages from his success. The duchy of Franconia he kept in his own hands, and in 944 he granted Lorraine to Conrad the Red, an energetic and honourable count, whom he still further attached to himself by giving him his daughter for his wife. Bavaria, on the death of its duke in 947, was placed under his brother Henry, who, having been pardoned, had become a loyal subject. The duchy of Swabia was also brought into Otto's family by the marriage of his son Ludolf with Duke Hermann's daughter, and by these means Otto made himself master of the kingdom. For the time, feudalism in truth meant that lands and offices were held on condition of service; the king was the genuine ruler, not only of freemen, but of the highest vassals in the nation.

Otto's wars with France and with the Slavs.

In the midst of these internal troubles Otto was attacked by the French king, Louis IV., who sought to regain Lorraine. However, the German king was soon able to turn his arms against his new enemy; he marched into France and made peace with Louis in 942. Otto's subsequent interventions in the affairs of France were mainly directed towards making peace between Louis and his powerful and rebellious vassal, Hugh the Great, duke of the Franks, both of whom were married to sisters of the German king. Much more important than Otto's doings in France were his wars with his northern and eastern neighbours. The duke of Bohemia, after a long struggle, was brought to submission in 950. Among the Slavs between the Elbe and the Oder the king was represented by Margrave Gero, a warrior well fitted for the rough work he had to do, loyal to his sovereign, but capable of any treachery towards his enemies, who conquered much of the country north of Bohemia between the Oder and the upper and middle Elbe. Margrave Billung, who looked after the Abotrites on the lower Elbe, was less fortunate, mainly because of the neighbourhood of the Danes, who, after the death of King Henry, often attacked the hated Germans, but some progress was made in bringing this district under German influence. Otto, having profound faith in the power of the church to reconcile conquered peoples to his rule, provided for the benefit of the Danes the bishoprics of Schleswig, Ripen and Aarhus; and among those which he established for the Slavs were the important bishoprics of Brandenburg and Havelberg. In his later years he set up the archbishopric of Magdeburg, which took in the sees of Meissen, Zeitz and Merseburg.

Otto in Italy.

Having secured peace in Germany and begun the real conquest of the border races, Otto was by far the greatest sovereign in Europe; and, had he refused to go beyond the limits within which he had hitherto acted, it is probable that he would have established a united monarchy. But a decision to which he soon came deprived posterity of the results which might have sprung from the policy of his earlier years. About 951 Adelaide, widow of Lothair, son of Hugh, king of Italy, having refused to marry the son of Berengar, margrave of Ivrea, was cast into prison and cruelly treated. She appealed to Otto; other reasons called him in the same direction, and in 951 he crossed the Alps and descended into Lombardy. He displaced Berengar, and was so fascinated by Queen Adelaide that within a few weeks he was married to her at Pavia. But Otto's son, Ludolf, who had received a promise of the German crown, saw his rights threatened by this marriage. He went to an old enemy of his father, Frederick, archbishop of Mainz, and the two plotted together against the king, who, hearing of their proceedings, returned to Germany in 952, leaving Duke Conrad of Lorraine as his representative in Italy. Otto, who did not suspect how deep were the designs of the conspirators, paid a visit to Mainz, where he was seized and was compelled to take certain solemn pledges which, after his escape, he repudiated.

The civil war.

War broke out in 953, and the struggle was the most serious in which he had been engaged. In Lorraine, of which duchy Otto made his brother Bruno, archbishop of Cologne, administrator, his cause was triumphant; but everywhere else dark clouds gathered over his head. Conrad the Red hurried from Italy and joined the rebels; in Swabia, in Bavaria, in Franconia and even in Saxony, the native land of the king, many sided with them. It is extremely remarkable that this movement acquired so quickly such force and volume. The explanation, according to some historians, is that the people looked forward with alarm to the union of Germany with Italy. There were still traditions of the hardships inflicted upon the common folk by the expeditions of Charlemagne, and it is supposed that they anticipated similar evils in the event of his empire being restored. Whether or not this be the true explanation, the power of Otto was shaken to its foundations. At last he was saved by the presence of an immense external peril. The Magyars were as usual stimulated to action by the disunion of their enemies; and Conrad and Ludolf made the blunder of inviting their help, a proceeding which disgusted the Germans, many of whom fell away from their side and rallied to the head and protector of the nation. In a very short time Conrad and the archbishop of Mainz submitted, and although Ludolf held out a little longer he soon asked for pardon. Lorraine was given to Bruno; but Conrad, its former duke, although thus punished, was not disgraced, for Otto needed his services in the war with the Magyars. The great battle against these foes was fought on the 10th of August 955 on the Lechfeld near

Defeat of Magyars.

Augsburg. After a fierce and obstinate fight, in which Conrad and many other nobles fell, the Germans were victorious; the Magyars were even more thoroughly scourged than in the battles in which Otto's father had given them their first real check. The deliverance of Germany was complete, and from this time, notwithstanding certain wild raids towards the east, the Magyars began to settle in the land they still occupy, and to adapt themselves to the conditions of civilized life.

Entreated by Pope John XII., who needed a helper against Berengar, Otto went a second time to Italy, in 961; and on this occasion he received from the pope at Rome the imperial crown. In 966 he was again in Italy, where he remained six years, exercising to the full his imperial rights in regard to the papacy, but occupied mainly in an attempt to make himself master of the southern, as well as of the northern half of the peninsula.

Otto crowned emperor.

By far the most important act of Otto's eventful life was his assumption of the Lombard and the imperial crowns. His successors steadily followed his example, and the sovereign crowned at Aix-la-Chapelle claimed as his right coronation by the pope in Rome. Thus grew up the Holy Roman Empire, that strange state which, directly descending through the empire of Charlemagne from the empire of the Caesars, contained so many elements foreign to ancient life. We are here concerned with it only as it affected Germany. Germany itself never until our own day became an empire. It is true that at last the Holy Roman Empire was in reality confined to Germany; but in theory it was something quite different. Like France, Germany was a kingdom, but it differed from France in this, that its king was also king in Italy and Roman emperor. As the latter title made him nominally the secular lord of the world, it might have been expected to excite the pride of his German subjects; and doubtless, after a time, they did learn to think highly of themselves as the imperial race. But the evidence tends to show that at first at least they had no wish for this honour, and would have preferred their ruler to devote himself entirely to his own people.

Connexion of Germany with the Empire.

There are signs that during Otto's reign they began to have a distinct consciousness of national life, their use of the word "deutsch" to indicate the whole people being one of these symptoms. Their common sufferings, struggles and triumphs, however, account far more readily for this feeling than the supposition that they were elated by their king undertaking obligations which took him for years together away from his native land. So solemn were the associations of the imperial title that, after acquiring it, Otto probably looked for more intimate obedience from his subjects. They were willing enough to admit the abstract claims of the Empire; but in the world of feudalism there was a multitude of established customs and rights which rudely conflicted with these claims, and in action, remote and abstract considerations gave way before concrete and present realities. Instead of strengthening the allegiance of the Germans towards their sovereign, the imperial title was the means of steadily undermining it. To the connexion of their kingdom with the Empire they owe the fact that for centuries they were the most divided of European nations, and that they have only recently begun to create a genuinely united state. France was made up of a number of loosely connected lands, each with its own lord, when Germany, under Otto, was to a large extent moved by a single will, well organized and strong. But the attention of the French kings was concentrated on their immediate interests, and in course of time they brought their unruly vassals to order. The German kings, as emperors, had duties which often took them away for long periods from Germany. This alone would have shaken their authority, for, during their absence, the great vassals seized rights which were afterwards difficult to recover. But the emperors were not merely absent, they had to engage in struggles in which they exhausted the energies necessary to enforce obedience at home; and, in order to obtain help, they were sometimes glad to concede advantages to which, under other conditions, they would have tenaciously clung. Moreover, the greatest of all their struggles was with the papacy; so that a power outside their kingdom, but exercising immense influence within it, was in the end always prepared to weaken them by exciting dissension among their people. Thus the imperial crown was the most fatal gift that could have been offered to the German kings; apparently giving them all things, it deprived them of nearly everything. And in doing this it inflicted on many generations incalculable and needless suffering.

Otto and the duchies.

By the policy of his later years Otto did much to prepare the way for the process of disintegration which he rendered inevitable by restoring the Empire. With the kingdom divided into five great duchies, the sovereign could always have maintained at least so much unity as Henry the Fowler secured; and, as the experience of Otto himself showed, there would have been chances of much greater centralization. Yet he threw away this advantage. Lorraine was divided into two duchies, Upper Lorraine and Lower Lorraine. In each duchy of the kingdom he appointed a count palatine, whose duty was to maintain the royal rights; and after Margrave Gero died in

965 his territory was divided into three marches, and placed under margraves, each with the same powers as Gero. Otto gave up the practice of retaining the duchies either in his own hands or in those of relatives. Even Saxony, his native duchy and the chief source of his strength, was given to Margrave Billung, whose family kept it for many years. To combat the power of the princes, Otto, especially after he became emperor and looked upon himself as the protector of the church, immensely increased the importance of the prelates. They received great gifts of land, were endowed with jurisdiction in criminal as well as civil cases, and obtained several other valuable sovereign rights. The emperor's idea was that, as church lands and offices could not be hereditary, their holders would necessarily favour the crown. But he forgot that the church had a head outside Germany, and that the passion for the rights of an order may be not less intense than that for the rights of a family. While the Empire was at peace with the popes the prelates did strongly uphold it, and their influence was unquestionably, on the whole, higher than that of rude secular nobles. But with the Empire and the Papacy in conflict, they could not but abide, as a rule, by the authority which had the most sacred claims to their loyalty. From all these circumstances it curiously happened that the sovereign who did more than almost any other to raise the royal power, was also the sovereign who, more than any other, wrought its decay.

Otto II.

Otto II. had been crowned German king at Aix-la-Chapelle and emperor at Rome during his father's lifetime. Becoming sole ruler in May 973, his troubles began in Lorraine, but were more serious in Bavaria, which was now a very important duchy. Its duke, Henry, the brother of Otto I., had died in 955 and had been succeeded by a young son, Henry, whose turbulent career subsequently induced the Bavarian historian Aventinus to describe him as *rixosus*, or the Quarrelsome. In 973 Burchard II., duke of Swabia, died, and the new emperor refused to give this duchy to Henry, further irritating this duke by bestowing it upon his enemy, Otto, a grandson of the emperor Otto I. Having collected allies Henry rebelled, and in 976 the emperor himself marched against him and drove him into Bohemia. Bavaria was taken from him and given to Otto of Swabia, but it was deprived of some of its importance. The southern part, Carinthia, which had hitherto been a march district, was separated from it and made into a duchy, and the church in Bavaria was made dependent upon the king and not upon the duke. Having arrived at this settlement Otto marched against the Bohemians, but while he was away from Germany war was begun against him by Henry, the new duke of Carinthia, who, forgetting the benefits he had just received, rose to avenge the wrongs of his friend, the deposed duke Henry of Bavaria. The emperor made peace with the Bohemians and quickly put down the rising. Henry of Bavaria was handed over to the keeping of the bishop of Utrecht and Carinthia received another duke.

Otto and France.

In his anxiety to obtain possession of southern Italy, Otto I. had secured as a wife for his son and successor Theophano, daughter of the East Roman emperor, Romanus II., the ruler of much of southern Italy. Otto II., having all his father's ambition with much of his strength and haughtiness, longed to get away from Germany and to claim these remoter districts. But he was detained for some time owing to the sudden invasion of Lower Lorraine by Lothair, king of France, in 978. So stealthily did the invader advance that the emperor had only just time to escape from Aix-la-Chapelle before the town was seized and plundered. As quickly as possible Otto placed himself at the head of a great army and marched to Paris, but he was compelled to retreat without taking the city, and in 980 peace was made.

Otto in Italy.

At last, after an expedition against the Poles, Otto was able to fulfil the wish of his heart; he went to Italy in 980 and never returned to Germany. His claims to southern Italy were vehemently opposed, and in July 982 he suffered a disastrous defeat at the hands of the East Roman emperor's subjects and their Saracen allies. The news of this crushing blow cast a gloom over Germany, which was again suffering from the attacks of her unruly neighbours. The Saxons were able to cope with the Danes and the German boundary was pushed forward in the south-east; but the Slavs fought with such courage and success that during the reigns of the emperors Otto II. and Otto III. much of the work effected by the margraves Hermann Billung and Gero was undone, and nearly two centuries passed before they were driven back to the position which they had perforce occupied under Otto the Great. Such were the first-fruits of the assumption of the imperial crown.

Otto III.

About six months before his death in Rome, in December 983, Otto held a diet at Verona which was attended by many of the German princes, who recognized his infant son Otto as his successor. Otto was then taken to Germany, and after his father's death he was crowned at Aix-la-Chapelle on Christmas Day 983. Henry of Bavaria was released from his confinement and became his guardian; but as this restless prince showed an inclination to secure the crown for himself, the young king was taken from him and placed in the care of his mother Theophano. Henry, however, gained a good deal of

support both within and without Germany and caused much anxiety to Otto's friends, but in 985 peace was made and he was restored to Bavaria. While Theophano acted as regent, the chief functions of government were discharged by Willigis, archbishop of Mainz (d. 1011), a vigorous prelate who had risen from a humble rank to the highest position in the German Church. He was aided by the princes, each of whom claimed a voice in the administration, and, during the lifetime of Theophano at least, a stubborn and sometimes a successful resistance was offered to the attacks of the Slavs. But under the prevalent conditions a vigorous rule was impossible, and during Otto's minority the royal authority was greatly weakened. In Saxony the people were quickly forgetting their hereditary connexion with the successors of Henry the Fowler; in Bavaria, after the death of Duke Henry in 995, the nobles, heedless of the royal power, returned to the ancient German custom and chose Henry's son Henry as their ruler.

The character of Otto.

In 995 Otto III. was declared to have reached his majority. He had been so carefully trained in all the learning of the time that he was called the "wonder of the world," and a certain fascination still belongs to his imaginative and fantastic nature. Imbued by his mother with the extravagant ideas of the East Roman emperors he introduced into his court an amount of splendour and ceremonial hitherto unknown in western Europe. The heir of the western emperors and the grandson of an eastern emperor, he spent most of his time in Rome, and fancied he could unite the world under his rule. In this vague design he was encouraged by Gerbert, the greatest scholar of the day, whom, as Silvester II., he raised to the papal throne. Meanwhile Germany was suffering severely from internal disorders and from the inroads of her rude neighbours; and when in the year 1000 Otto visited his northern kingdom there were hopes that he would smite these enemies with the vigour of his predecessors. But these hopes were disappointed; on the contrary, Otto seems to have released Boleslaus, duke of the Poles, from his vague allegiance to the German kings, and he founded an archbishopric at Gnesen, thus freeing the Polish sees from the authority of the archbishop of Magdeburg.

Henry II.

When Otto III. died in January 1002 there remained no representative of the elder branch of the imperial family, and several candidates came forward for the vacant throne. Among these candidates was Henry of Bavaria, son of Duke Henry the Quarrelsome and a great-grandson of Henry the Fowler, and at Mainz in June 1002 this prince was chosen German king as Henry II. Having been recognized as king by the Saxons, the Thuringians and the nobles of Lorraine, the new king was able to turn his attention to the affairs of government, but on the whole his reign was an unfortunate one for Germany. For ten years civil war raged in Lorraine; in Saxony much blood was shed in petty quarrels; and Henry made expeditions against his turbulent vassals in Flanders and Friesland. He also interfered in the affairs of Burgundy, but the acquisition of this kingdom was the work of his successor, Conrad II. During nearly the whole of this reign the Germans were fighting the Poles. Boleslaus of Poland, who was now a very powerful sovereign, having conquered Lusatia and Silesia, brought Bohemia also under his rule and was soon at variance with the German king. Anxious to regain these lands Henry allied himself with some Slavonic tribes, promising not to interfere with the exercise of their heathen religion, while Boleslaus found supporters among the discontented German nobles. The honours of the ensuing war were with Henry, and when peace was made in 1006 Boleslaus gave up Bohemia, but the struggle was soon renewed and neither side had gained any serious advantage when peace was again made in 1013. A third Polish war broke out in 1015. Henry led his troops in person and obtained assistance from the Russians and the Hungarians; peace was concluded in 1018, the Elbe remaining the north-east boundary of Germany. Henry made three journeys to Italy, being crowned king of the Lombards at Pavia in 1004 and emperor at Rome ten years later. Before the latter event, in order to assert his right of sovereignty over Rome, he called himself king of the Romans, a designation which henceforth was borne by his successors until they received the higher title from the pope. Hitherto a sovereign crowned at Aix-la-Chapelle had been "king of the West Franks," or "king of the Franks and Saxons." Henry was generous to the church, to which he looked for support, but he maintained the royal authority over the clergy. Although generally unsuccessful he strove hard for peace, and during this reign the principle of inheritance was virtually established with regard to German fiefs.

Conrad II.

After Henry's death the nobles met at Kamba, near Oppenheim, and in September 1024 elected Conrad, a Franconian count, to the vacant throne. Although favoured by the German clergy the new king, Conrad II., had to face some opposition; this, however, quickly vanished and he received the homage of the nobles in the various duchies and seemed to have no reason to dread internal enemies. Nevertheless, he had soon to battle with a conspiracy headed by his stepson, Ernest II., duke of Swabia. This was caused primarily by Conrad's avowed desire to acquire the kingdom of Burgundy, but other reasons for dissatisfaction existed, and the revolting duke found it easy to gather around him the scattered forces of discontent. However, the king was quite able to deal with the rising, which, indeed, never attained serious proportions, although Ernest gave

continual trouble until his death in 1030. With regard to the German duchies Conrad followed the policy of Otto the Great. He wished to control, not to abolish them. In 1026, when Duke Henry of Bavaria died, he obtained the duchy for his son Henry, afterwards the emperor Henry III.; later, despite the opposition of the nobles, he invested the same prince with Swabia, where the ducal family had died out. Franconia was in the hands of Conrad himself; thus Saxony, Thuringia, Carinthia and Lorraine were the only duchies not completely dependent upon the king.

When Conrad ascended the throne the safety of Germany was endangered from three different points. On the north was Denmark ruled by Canute the Great; on the east was the wide Polish state whose ruler, Boleslaus, had just taken the title of king; and on the south-east was Hungary, which under its king, St Stephen, was rapidly becoming an organized and formidable power. Peace was maintained with Canute, and in 1035 a treaty was concluded and the land between the Eider and the Schlei was ceded to Denmark. In 1030 Conrad waged a short war against Hungary, but here also he was obliged to assent to a cession of territory. In Poland he was more fortunate. After the death of Boleslaus in 1025 the Poles plunged into a civil war, and Conrad was able to turn this to his own advantage. In 1031 he recovered Lusatia and other districts, and in 1033 the Polish duke of Mesislaus did homage to him at Merseburg. His authority was recognized by the Bohemians, and two expeditions taught the Slavonic tribes between the Elbe and the Oder to respect his power.

The neighbouring countries.

In Italy, whither he journeyed in 1026 and 1036, Conrad was not welcomed. Although as emperor and as king of the Lombards he was the lawful sovereign of that country, the Germans were still regarded as intruders and could only maintain their rights by force. The event which threw the greatest lustre upon this reign was the acquisition of the kingdom of Burgundy, or Arles, which was bequeathed to Conrad by its king, Rudolph III., the uncle of his wife, Gisela. Rudolph died in 1032, and in 1033 Conrad was crowned king at Peterlingen, being at once recognized by the German-speaking population. For about two years his rival, Odo, count of Champagne, who was supported by the Romance-speaking inhabitants, kept up the struggle against him, but eventually all opposition was overcome and the possession of Burgundy was assured to the German king.

Conrad in Italy.

This reign is important in the history of Germany because it marks the beginning of the great imperial age, but it has other features of interest. In dealing with the revolt of Ernest of Swabia Conrad was aided by the reluctance of the vassals of the great lords to follow them against the king. This reluctance was due largely to the increasing independence of this class of landholders, who were beginning to learn that the sovereign, and not their immediate lord, was the protector of their liberties; the independence in its turn arose from the growth of the principle of heredity. In Germany Conrad did not definitely decree that fiefs should pass from father to son, but he encouraged and took advantage of the tendency in this direction, a tendency which was, obviously, a serious blow at the power of the great lords over their vassals. In 1037 he issued from Milan his famous edict for the kingdom of Italy which decreed that upon the death of a landholder his fief should descend to his son, or grandson, and that no fiefholder should be deprived of his fief without the judgment of his peers. In another direction Conrad’s policy was to free himself as king from dependence upon the church. He sought to regain lands granted to the church by his predecessors; prelates were employed on public business much less frequently than heretofore. He kept a firm hand over the church, but his rule was purely secular; he took little or no interest in ecclesiastical affairs. During this reign the centre and basis of the imperial power in Germany was moved southwards. Saxony, the home of the Ottos, became less prominent in German politics, while Bavaria and the south were gradually gaining in importance.

The nobles and the land.

Henry III., who had been crowned German king and also king of Burgundy during his father’s lifetime, took possession of his great inheritance without the slightest sign of opposition in June 1039. He was without the impulsiveness which marred Conrad’s great qualities, but he had the same decisive judgment, wide ambition and irresistible will as his father. During the late king’s concluding years a certain Bretislaus, who had served Conrad with distinction in Lusatia, became duke of Bohemia and made war upon the disunited Poles, easily bringing them into subjection. Thus Germany was again threatened with the establishment of a great and independent Slavonic state upon her eastern frontier. To combat this danger Henry invaded Bohemia, and after two reverses compelled Bretislaus to appear before him as a suppliant at Regensburg. The German king treated his foe generously and was rewarded by receiving to the end of his reign the service of a loyal vassal; he also gained the goodwill of the Poles by helping to bring about the return of their duke, Casimir I., who willingly did homage for his land. The king of Denmark, too,

Henry III.

acknowledged Henry as his feudal lord. Moreover, by several campaigns in Hungary the German king brought that country into the position of a fief of the German crown. This war was occasioned by the violence of the Hungarian usurper, Aba Samuel, and formed Henry's principal occupation from 1041 to 1045.

Henry's internal policy.

In Germany itself Henry acquired, during the first ten years of his rule, an authority which had been unknown since the days of Otto the Great. Early in his reign he had made a determined enemy of Godfrey the Bearded, duke of upper Lorraine, who, in 1044, conspired against him and who found powerful allies in Henry I., king of France, in the counts of Flanders and Holland, and in certain Burgundian nobles. However, Godfrey and his friends were easily worsted, and when the dispossessed duke again tried the fortune of war he found that the German king had detached Henry of France from his side and was also in alliance with the English king, Edward the Confessor. While thus maintaining his authority in the north-east corner of the country by alliances and expeditions, Henry was strong enough to put the laws in motion against the most powerful princes and to force them to keep the public peace. Under his severe but beneficent rule, Germany enjoyed a period of internal quiet such as she had probably never experienced before, but even Henry could not permanently divert from its course the main political tendency of the age, the desire of the great feudal lords for independence.

Henry's wars.

Cowed, but unpacified and discontented, the princes awaited their opportunity, while the king played into their hands by allowing the southern duchies, Swabia, Bavaria and Carinthia, to pass from under his own immediate control. His position was becoming gradually weaker when in 1051 he invaded Hungary, where a reaction against German influence was taking place. After a second campaign in 1052 the Hungarian king, Andrew, was compelled to make peace and to own himself the vassal of the German king. Meanwhile Saxony and Bavaria were permeated by the spirit of unrest, and Henry returned from Hungary just in time to frustrate a widespread conspiracy against him in southern Germany. Encouraged by the support of the German rebels, Andrew of Hungary repudiated the treaty of peace and the German supremacy in that country came to a sudden end. Among the causes which undermined Henry's strength was the fact that the mediate nobles, who had stood loyally by his father, Conrad, were not his friends; probably his wars made serious demands upon them, and his strict administration of justice, especially his insistence upon the maintenance of the public peace, was displeasing to them.

Henry and the church.

At the beginning of Henry's reign the church all over Europe was in a deplorable condition. Simony was universally practised and the morality of the clergy was very low. The Papacy, too, had sunk to a degraded condition and its authority was annihilated, not only by the character of successive popes, but by the fact that there were at the same time three claimants for the papal throne. Henry, a man of deep, sincere and even rigorous piety, regarded these evils with sorrow; he associated himself definitely with the movement for reform which proceeded from Cluny, and commanded his prelates to put an end to simony and other abuses. Then moving farther in the same direction he resolved to strike at the root of the evil by the exercise of his imperial authority. In 1046 he entered Italy at the head of an army which secured for him greater respect than had been given to any German ruler since Charlemagne, and at Sutri and in Rome he deposed the three rival popes. He then raised to the papal see Suidger, bishop of Bamberg, who, as Pope Clement II., crowned him emperor; after Clement three other German popes—Damasus II., Leo IX. and Victor II.—owed their elevation to Henry. Under these popes a new era began for the church, and in thus reforming the Papacy Henry III. fulfilled what was regarded as the noblest duty of his imperial office, but he also sharpened a weapon whose keen edge was first tried against his son.

The last years of Henry III. form a turning-point in German history. Great kings and emperors came after him, but none of them possessed the direct, absolute authority which he freely wielded; even in the case of the strongest the forms of feudalism more and more interposed themselves between the monarch and the nation, and at last the royal authority virtually disappeared. During this reign the towns entered upon an age of prosperity, and the Rhine and the Weser became great avenues of trade.

The minority of Henry IV.

When Henry died in October 1056 the decline of the royal authority was accelerated by the fact that his successor was a child. Henry IV., who had been crowned king in 1054, was at first in charge of his mother, the empress Agnes, whose weak and inefficient rule was closely watched by Anno, archbishop of Cologne. In 1062, however, Anno and other prominent prelates and laymen, perhaps jealous of the influence exercised at court by Henry, bishop of Augsburg (d. 1063), managed by a clever trick to get possession of the king's person. Deserted by her friends Agnes retired, and forthwith Anno began to rule the state. But soon he was compelled to share his duties with

Adalbert, archbishop of Bremen, and a year or two later Adalbert became virtually the ruler of Germany, leaving Anno to attend to affairs in Italy. Adalbert's rule was very successful. Compelling King Solomon to own Henry's supremacy he restored the influence of Germany in Hungary; in internal affairs he restrained the turbulence of the princes, but he made many enemies, especially in Saxony, and in 1066 Henry, who had just been declared of age, was compelled to dismiss him. The ambitious prelate, however, had gained great influence over Henry, who had grown up under the most diverse influences. The young king was generous and was endowed with considerable intellectual gifts; but passing as he did from Anno's gloomy palace at Cologne to Adalbert's residence in Bremen, where he was petted and flattered, he became wayward and wilful.

Henry's personal rule.

Henry IV. assumed the duties of government soon after the fall of Adalbert and quickly made enemies of many of the chief princes, including Otto of Nordheim, the powerful duke of Bavaria, Rudolph, duke of Swabia, and Berthold of Zähringen, duke of Carinthia. In Saxony, where, like his father, he frequently held his court, he excited intense hostility by a series of injudicious proceedings. While the three Ottos were pursuing the shadow of imperial greatness in Italy, much of the crown land in this duchy had been seized by the nobles and was now held by their descendants. Henry IV. insisted on the restoration of these estates and encroached upon the rights of the peasants. Moreover, he built a number of forts which the people thought were intended for prisons; he filled the land with riotous and overbearing Swabians; he kept in prison Magnus, the heir to the duchy; and is said to have spoken of the Saxons in a tone of great contempt. All classes were thus combined against him, and when he ordered his forces to assemble for a campaign against the Poles the Saxons refused to join the host. In 1073 the universal discontent found expression in a great assembly at Wormesleben, in which the leading part was taken by Otto of Nordheim, by Werner, archbishop of Magdeburg, and by Burkhard II., bishop of Halberstadt. Under Otto's leadership the Thuringians joined the rising, which soon spread far and wide. Henry was surprised by a band of rebels in his fortress at the Harzburg; he fled to Hersfeld and appealed to the princes for support, but he could not compel them to aid him and they would grant him nothing. After tedious negotiations he was obliged to yield to the demands of his enemies, and peace was made at Gerstungen in 1074. Zealously carrying out the conditions of the peace, the peasants not only battered down the detested forts, they even destroyed the chapel at the Harzburg and committed other acts of desecration. These proceedings alarmed the princes, both spiritual and secular, and Henry, who had gained support from the cities of the Rhineland, was able to advance with a formidable army into Saxony in 1075. He gained a decisive victory, rebuilt the forts and completely restored the authority of the crown.

Pope Gregory VII.

In 1073, while Germany was in this confused state, Hildebrand had become pope as Gregory VII., and in 1075 he issued his famous decree against the marriage of the clergy and against their investiture by laymen. To the latter decree it was impossible for any sovereign to submit, and in Germany there were stronger reasons than elsewhere for resistance. A large part of the land of the country was held by the clergy, and most of it had been granted to them because it was supposed that they would be the king's most efficient helpers. Were the feudal tie broken, the crown must soon vanish, and the constitution of medieval society undergo a radical change. Henry, who hitherto had treated the new pope with excessive respect, now announced his intention of going to Rome and assuming the imperial title. The pope, to whom the Saxons had been encouraged to complain, responded by sending back certain of Henry's messengers, with the command that the king should do penance for the crimes of which his subjects accused him. Enraged by this unexpected arrogance, Henry summoned a synod of German bishops to Worms in January 1076, and Hildebrand was declared deposed. The papal answer was a bull excommunicating the German king, dethroning him and liberating his subjects from their oath of allegiance.

Effect of Henry's excommunication.

Never before had a pope ventured to take so bold a step. It was within the memory even of young men that a German king had dismissed three popes, and had raised in turn four of his own prelates to the Roman see. And now a pope attempted to drag from his throne the successor of this very sovereign. The effect of the bull was tremendous; no other was ever followed by equally important results. The princes had long been chafing under the royal power; they had shaken even so stern an autocrat as Henry III., and the authority of Henry IV. was already visibly weakened. At this important stage in their contest with the crown a mighty ally suddenly offered himself, and with indecent eagerness they hastened to associate themselves with him. Their vassals and subjects, appalled by the invisible powers wielded by the head of the church, supported them in their rebellion. The Saxons again rose in arms and Otto of Nordheim succeeded in uniting the North and South German supporters of the pope. Henry had looked for no such result as this; he did not understand the influences which lay beneath

the surface and was horrified by his unexpected isolation. At a diet in Tribur he humbled himself before the princes, but in vain. They turned from him and decided that the pope should be asked to judge Henry; that if, within a year, the sentence of excommunication were not removed, the king should lose his crown; and that in the meantime he should live in retirement.

Scene at Canossa.

Next came the strange scene at Canossa which burned itself into the memory of Europe. For three days the representative of the Caesars entreated to be admitted into the pope's presence. No other mode of escape than complete subjection to Gregory had suggested itself, or was perhaps possible; but it did not save him. Although the pope forgave him, the German princes, resolved not to miss the chance which fortune had given them, met in March 1077, and deposed him, electing Rudolph, duke of Swabia, as his successor. But Henry's bitter humiliations transformed his character; they brought out all his latent capacities of manliness.

The struggle over investitures.

The war of investitures that followed was the opening of the tremendous struggle between the Empire and the Papacy, which is the central fact of medieval history and which, after two centuries of conflict, ended in the exhaustion of both powers. Its details belong more to the history of Italy than to that of Germany, where it took the form of a fight between two rival kings, but in Germany its effects were more deeply felt. The nation now plucked bitter fruit from the seed planted by Otto the Great in assuming the imperial crown and by a long line of kings and emperors in lavishing worldly power upon the church. In the ambition of the spiritual and the secular princes the pope had an immensely powerful engine of offence against the emperor, and without the slightest scruple this was turned to the best advantage.

Henry IV. and the anti-kings.

When this struggle began it may be said in general that Henry was supported by the cities and the lower classes, while Rudolph relied upon the princes and the opponents of a united Germany; or, to make another division, Henry's strength lay in the duchies of Franconia and Bavaria, Rudolph's in Swabia and Saxony. In the Rhineland and in southern Germany the cities had been steadily growing in wealth and power, and they could not fail to realize that they had more to fear from the princes than from the crown. Hence when Henry returned to Germany in 1078 Worms, Spires and many other places opened their gates to him and contributed freely to his cause; nevertheless his troops were beaten in three encounters and Pope Gregory thundered anew against him in March 1080. However, the fortune of war soon turned, and in October 1080 Rudolph of Swabia was defeated and slain. Henry then carried the war into Italy; in 1084 he was crowned emperor in Rome by Wibert, archbishop of Ravenna, whom, as Clement III., he had set up as an anti-pope, and in 1085 Gregory died an exile from Rome. Meanwhile in Germany Henry's opponents had chosen Hermann, count of Luxemburg, king in succession to Rudolph of Swabia. Hermann, however, was not very successful, and when Henry returned to Germany in 1084 he found that his most doughty opponent, Otto of Nordheim, was dead, and that the anti-king had few friends outside Saxony. This duchy was soon reduced to obedience and was treated with consideration, and when the third anti-king, Egbert, margrave of Meissen, was murdered in 1090 there would have been peace if Germany had followed her own impulses.

Henry and the Papacy.

In the Papacy, however, Henry had an implacable foe; and again and again when he seemed on the point of a complete triumph the smouldering embers of revolt were kindled once more into flame. In Italy his son, Conrad, was stirred up against him and in 1093 was crowned king at Monza; then ten years later, when Germany was more peaceful than it had been for years and when the emperor's authority was generally acknowledged, his second son, Henry, afterwards the emperor Henry V., was induced to head a dangerous rebellion. The Saxons and the Thuringians were soon in arms, and they were joined by those warlike spirits of Germany to whom an age of peace brought no glory and an age of prosperity brought no gain. After some desultory fighting Henry IV. was taken prisoner and compelled to abdicate; he had, however, escaped and had renewed the contest when he died in August 1106.

The First Crusade.

During this reign the first crusade took place, and the German king suffered severely from the pious zeal which it expressed and intensified. The movement was not in the end favourable to papal supremacy, but the early crusaders, and those who sympathized with them, regarded the enemies of the pope as the enemies of religion.

Henry V. in

The early years of Henry V.'s reign were spent in campaigns in Flanders, Bohemia, Hungary and Poland, but the new king was soon reminded that the dispute over investitures was unsettled. Pope Paschal II. did not doubt, now that Henry IV. was dead, that he would speedily triumph; but he was soon undeceived. Henry V., who with unconscious irony had promised to treat the pope as a father, continued, like his predecessors, to

Germany.

invest prelates with the ring and the staff, and met the expostulations of Paschal by declaring that he would not surrender a right which had belonged to all former kings. Lengthened negotiations took place but they led to no satisfactory result, while the king's enemies in Germany, taking advantage of the deadlock, showed signs of revolt. One of the most ardent of these enemies was Lothair of Supplinburg, whom Henry himself had made duke of Saxony upon the extinction of the Billung family in 1106. Lothair was humbled in 1112, but he took advantage of the emperor's difficulties to rise again and again, the twin pillars of his strength being the Saxon hatred of the Franconian emperors and an informal alliance with the papal see. Henry's chief friends were his nephews, the two Hohenstaufen princes, Frederick and Conrad, to whose father Frederick the emperor Henry IV. had given the duchy of Swabia when its duke Rudolph became his rival. The younger Frederick succeeded to this duchy in 1105, while ten years later Conrad was made duke of Franconia, a country which for nearly a century had been under the immediate government of the crown. The two brothers were enthusiastic imperialists, and with persistent courage they upheld the cause of their sovereign during his two absences in Italy.

At last, in September 1122, the investiture question was settled by the concordat of Worms. By this compromise, which exhaustion forced upon both parties, the right of electing prelates was granted to the clergy, and the emperor surrendered the privilege of investing them with the ring and the staff. On the other hand it was arranged that these elections should take place in the presence of the emperor or his representative, and that he should invest the new prelate with the sceptre, thus signifying that the bishop, or abbot, held his temporal fiefs from him and not from the pope. In Germany the victory remained with the emperor, but it was by no means decisive. The Papacy was far from realizing Hildebrand's great schemes; yet in regard to the question in dispute it gained solid advantage, and its general authority was incomparably more important than it had been half a century before. During this period it had waged war upon the emperor himself. Instead of acknowledging its inferiority as in former times it had claimed to be the higher power; it had even attempted to dispose of the imperial crown as if the Empire were a papal fief; and it had found out that it could at any time tamper, and perhaps paralyse, the imperial authority by exciting internal strife in Germany. Having thus settled this momentous dispute Henry spent his later years in restoring order in Germany, and in planning to assist his father-in-law, Henry I. of England, in France. During this reign under the lead of Otto, bishop of Bamberg (*c.* 1063-1139), Pomerania began to come under the influence of Germany and of Christianity.

The concordat of Worms.

The Franconian dynasty died out with Henry V. in May 1125, and after a protracted contest Lothair, duke of Saxony, the candidate of the clergy, was chosen in the following August to succeed him. The new king's first enterprise was a disastrous campaign in Bohemia, but before this occurrence he had aroused the enmity of the Hohenstaufen princes by demanding that they should surrender certain lands which had formerly been the property of the crown. Lothair's rebuff in Bohemia stiffened the backs of Frederick and Conrad, and in order to contend with them the king secured a powerful ally by marrying his daughter Gertrude to Henry the Proud, a grandson of Welf, whom Henry IV. had made duke of Bavaria, a duchy to which Henry himself had succeeded in 1126. Henry was perhaps the most powerful of the king's subjects, nevertheless the dukes of Swabia and Franconia withstood him, and a long war desolated South Germany. This was ended by the submission of Frederick in 1134 and of Conrad in the following year. Lothair's position, which before 1130 was very weak, had gradually become stronger. He had put down the disorder in Bavaria, in Saxony and in Lorraine; a diet held at Magdeburg in 1135 was attended by representatives from the vassal states of Denmark, Hungary, Bohemia and Poland; and in 1136, when he visited Italy for the second time, Germany was in a very peaceful condition. In June 1133 during the king's first visit to Italy he had received from Pope Innocent II. the imperial crown and also the investiture of the extensive territories left by Matilda, marchioness of Tuscany; and at this time the pope seems to have claimed the emperor as his vassal, a statement to this effect (*post homo fit papae, sumit quo dante coronam*) being inscribed in the audience hall of the Lateran at Rome.

The reign of Lothair the Saxon.

(*Continued in volume* 11 *slice* 8.)

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1 *i.e.* the territory once under the jurisdiction of an imperial *Vogt* or *advocatus* (see ADVOCATE).

2 The question, much disputed between Germans and Danes, is exhaustively treated by P. Lauridsen in F. de Jessen's *La Question de Sleswig* (Copenhagen, 1906), pp. 114 et seq.

3 See the comparative study in Percy Ashley's *Local and Central Government* (London, 1906).

4 The *Kreis* in Württemberg corresponds to the *Regierungsbezirk* elsewhere.

5 The system of compulsory registration, which involves a notification to the police of any change of

address (even temporary), of course makes it easy to determine the domicile in any given case.

6 Actually between 1883 and 1908 over five million recruits passed through the drill sergeant's hands, as well as perhaps 210,000 one-year volunteers.

7 These last have a curious history. They were formed from about 1890 onwards, by individual squadrons, two or three being voted each year. Ostensibly raised for the duties of mounted orderlies, at a time when it would have been impolitic to ask openly for more cavalry, they were little by little trained in real cavalry work, then combined in provisional regiments for disciplinary purposes and at last frankly classed as cavalry.

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