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THE ENCYCLOPÆDIA BRITANNICA

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ELEVENTH EDITION

VOLUME VII SLICE X

David, St to Demidov

Articles in This Slice

DAVID, ST (*Dewi, Sant*), the national and tutelar saint of Wales, whose annual festival, known as "St David's Day," falls on the 1st of March. Few historical facts are known regarding the saint's life and actions, and the dates both of his birth and death are purely conjectural, although there is reason to suppose he was born about the year 500 and died at a great age towards the close of the 6th century. According to his various biographers he was the son of Sandde, a prince of the line of Cunedda, his mother being Non, who ranks as a Cymric saint. He seems to have taken a prominent part in the celebrated synod of Llanddewi-Brefi (see CARDIGANSHIRE), and to have presided at the so-called "Synod of Victory," held some years later at Caerleon-on-Usk. At some date unknown, St David, as *penescoli* or primate of South Wales, moved the seat of ecclesiastical government from Caerleon to the remote headland of Mynyw, or Menevia, which has ever since, under the name of St David's (*Ty-Dewi*), remained the cathedral city of the western see. St David founded numerous churches throughout all parts of South Wales, of which fifty-three still recall his name, but apparently he never penetrated farther north than the region of Powys, although he seems to have visited Cornwall. With the passing of time the saint's fame increased, and his shrine at St David's became a notable place of pilgrimage, so that by the time of the Norman conquest his importance and sanctity were fully recognized, and at Henry I.'s request he was formally canonized by Pope Calixtus II. about 1120.

Of the many biographies of St David, the earliest known is that of Rhyddmarch, or Ricemarchus (*c.* 1090), one of the last British bishops of St David's, from whose work Giraldus Cambrensis (*q.v.*) chiefly compiled his

extravagant life of the saint.

DAVID I. (1084-1153), king of Scotland, the youngest son of Malcolm Canmore and (Saint) Margaret, sister of Edgar Ætheling, was born in 1084. He married in 1113 Matilda, daughter and heiress of Waltheof, earl of Northumbria, and thus became possessed of the earldom of Huntingdon. On the death of Edgar, king of Scotland, in 1107, the territories of the Scottish crown were divided in accordance with the terms of his will between his two brothers, Alexander and David. Alexander, together with the crown, received Scotland north of the Forth and Clyde, David the southern district with the title of earl of Cumbria. The death of Alexander I. in 1124 gave David possession of the whole. In 1127, in the character of an English baron, he swore fealty to Matilda as heiress to her father Henry I., and when the usurper Stephen ousted her in 1135 David vindicated her cause in arms and invaded England. But Stephen marched north with a great army, whereupon David made peace. The peace, however, was not kept. After threatening an invasion in 1137, David marched into England in 1138, but sustained a crushing defeat on Cutton Moor in the engagement known as the battle of the Standard. He returned to Carlisle, and soon afterwards concluded peace. In 1141 he joined Matilda in London and accompanied her to Winchester, but after a narrow escape from capture he returned to Scotland. Henceforth he remained in his own kingdom and devoted himself to its political and ecclesiastical reorganization. A devoted son of the church, he founded five bishoprics and many monasteries. In secular politics he energetically forwarded the process of feudalization which had been initiated by his immediate predecessors. He died at Carlisle on the 24th of May 1153.

DAVID II. (1324-1371), king of Scotland, son of King Robert the Bruce by his second wife, Elizabeth de Burgh (d. 1327), was born at Dunfermline on the 5th of March 1324. In accordance with the terms of the treaty of Northampton he was married in July 1328 to Joanna (d. 1362), daughter of the English king, Edward II., and became king of Scotland on his father's death in June 1329, being crowned at Scone in November 1331. Owing to the victory of Edward III. of England and his protégé, Edward Baliol, at Halidon Hill in July 1333, David and his queen were sent for safety into France, reaching Boulogne in May 1334, and being received very graciously by the French king, Philip VI. Little is known about the life of the Scottish king in France, except that Château Gaillard was given to him for a residence, and that he was present at the bloodless meeting of the English and French armies at Vironfosse in October 1339. Meanwhile his representatives had obtained the upper hand in Scotland, and David was thus enabled to return to his kingdom in June 1341, when he took the reins of government into his own hands. In 1346 he invaded England in the interests of France, but was defeated and taken prisoner at the battle of Neville's Cross in October of this year, and remained in England for eleven years, living principally in London and at Odiham in Hampshire. His imprisonment was not a rigorous one, and negotiations for his release were soon begun. Eventually, in October 1357, after several interruptions, a treaty was signed at Berwick by which the Scottish estates undertook to pay 100,000 marks as a ransom for their king. David, who had probably recognized Edward III. as his feudal superior, returned at once to Scotland; but owing to the poverty of the kingdom it was found impossible to raise the ransom. A few instalments were paid, but the king sought to get rid of the liability by offering to make Edward III., or one of his sons, his successor in Scotland. In 1364 the Scottish parliament indignantly rejected a proposal to make Lionel, duke of Clarence, the next king; but David treated secretly with Edward III. over this matter, after he had suppressed a rising of some of his unruly nobles. The king died in Edinburgh Castle on the 22nd of February 1371. His second wife was Margaret, widow of Sir John Logie, whom he divorced in 1369; but he left no children, and was succeeded by his nephew, Robert II. David was a weak and incapable ruler, without a spark of his father's patriotic spirit.

See Andrew of Wyntoun, *The orygynale cronykil of Scotland*, edited by D. Laing (Edinburgh, 1872-1879); John of Fordun, *Chronica gentis Scotorum*, edited by W. F. Skene (Edinburgh, 1871-1872); J. H. Burton, *History of Scotland*, vol. ii. (Edinburgh, 1905); and A. Lang, *History of Scotland*, vol. i. (Edinburgh, 1900).

DAVID, the name of three Welsh princes.

DAVID I. (d. 1203), a son of Prince Owen Gwynedd (d. 1169), came into prominence as a leader of the Welsh during the expedition of Henry II. in 1157. In 1170 he became lord of Gwynedd (*i.e.* the district around Snowdon), but some regarded him as a bastard, and Gwynedd was also claimed by other members of his family. After fighting with varying fortunes he sought an ally in the English king, whom he supported during the baronial rising in 1173; then after this event he married Henry's half-sister Emma. But his enemies increased in power, and about 1194 he was driven from Wales by the partisans of his half-brother Llewelyn ab Iorwerth. The chronicler Benedictus Abbas calls David *rex*, and Rhuddlan castle was probably the centre of his vague authority.

DAVID II. (*c.* 1208-1246) was a son of the great Welsh prince, Llewelyn ab Iorwerth, and through his mother Joanna was a grandson of King John. He married an English lady, Isabella de Braose, and, having been

recognized as his father's heir both by Henry III. and by the Welsh lords, he had to face the hostility of his half-brother Gruffydd, whom he seized and imprisoned in 1239. When Llewelyn died in April 1240, David, who had already taken some part in the duties of government, was acknowledged as a prince of North Wales, doing homage to Henry III. at Gloucester. However, he was soon at variance with the English king, who appears to have espoused the cause of the captive Gruffydd. Henry's Welsh campaign in 1241 was bloodless but decisive. Gruffydd was surrendered to him; David went to London and made a full submission, but two or three years later he was warring against some English barons on the borders. To check the English king he opened negotiations with Innocent IV., doubtless hoping that the pope would recognize Wales as an independent state, but here, as on the field of battle, Henry III. was too strong for him. Just after Henry's second campaign in Wales the prince died in March 1246.

David III. (d. 1283) was a son of Gruffydd and thus a nephew of David II. His life was mainly spent in fighting against his brother, the reigning prince, Llewelyn ab Gruffydd. His first revolt took place in 1254 or 1255, and after a second about eight years later he took refuge in England, returning to Wales when Henry III. made peace with Llewelyn in 1267. Then about 1274 the same process was repeated. David attended Edward I. during the Welsh expedition of 1277, receiving from the English king lands in North Wales; but in 1282 he made peace with Llewelyn and suddenly attacked the English garrisons, a proceeding which led to Edward's final conquest of Wales. After Llewelyn's death in December 1282 David maintained the last struggle of the Welsh for independence. All his efforts, however, were vain; in June 1283 he was betrayed to Edward, was tried by a special court and sentenced to death, and was executed with great barbarity at Shrewsbury in October 1283. As the last native prince of Wales, David's praises have been sung by the Welsh bards, but his character was not attractive, and a Welsh historian says "his life was the bane of Wales."

DAVID, FÉLICIEN (1810-1876), French composer, was born on the 13th of April 1810 at Cadenet, in the department of Vaucluse. As a child he showed unusual musical precocity, and being early left an orphan he was admitted into the choir of Saint Sauveur at Aix. He was for a time employed in an attorney's office, but quitted his service to become *chef d'orchestre* in the theatre at Aix, and chapel-master at Saint Sauveur. Then he went to Paris, being provided with £100 a year by a rich uncle. After having studied for a while at the Paris Conservatoire, he joined the sect of Saint Simonians, and in 1833 travelled in the East in order to preach the new doctrine. After three years' absence, during which Constantinople and Smyrna were visited and some time was spent in Egypt, he returned to France and published a collection of *Oriental Melodies*. For several years he worked in retirement, and wrote two symphonies, some chamber music and songs. On the 8th of December 1844 he suddenly leapt into fame through the extraordinary success obtained by his symphonic ode *Le Désert*, which was produced at the Conservatoire. In this work David had struck out a new line. He had attempted in simple strains to evoke the majestic stillness of the desert. Notwithstanding its title of "symphonic ode," *Le Désert* has little in common with the symphonic style. What distinguishes it is a certain naïveté of expression and an effective oriental colouring. In this last respect David may be looked upon as the precursor of a whole army of composers. His succeeding works, *Moïse au Sinai* (1846), *Christophe Colomb* (1847), *L'Éden* (1848), scarcely bore out the promise shown in *Le Désert*, although the second of these compositions was successful at the time of its production. David now turned his attention to the theatre, and produced the following operas in succession: *La Perle du Brésil* (1851), *Herculanum* (1859), *Lalla-Roukh* (1862), *Le Saphir* (1865). Of these, *Lalla-Roukh* is the one which has obtained the greatest success. In 1868 he gained the award of the French Institute for the biennial prize given by the emperor; and in 1869 he was made librarian at the Conservatoire instead of Berlioz, whom subsequently he succeeded as a member of the Institute. He died at Saint-Germain-en-Laye on the 29th of August 1876. If David can scarcely be placed in the first rank of French composers, he nevertheless deserves the consideration due to a sincere artist, who was undoubtedly inspired by lofty ideals. At a time when the works of Berlioz were still unappreciated by the majority of people, David succeeded in making the public take interest in music of a picturesque and descriptive kind. Thus he may be considered as one of the pioneers of modern French musical art.

DAVID, GERARD [Gheeraert Davit], (?-1523), Netherlands painter, born at Oudewater in Holland between 1450 and 1460, was the last great master of the Bruges school. He was only rescued from complete oblivion in 1860-1863 by Mr W. J. H. Weale, whose researches in the archives of Bruges brought to the light the main facts of the master's life. We have now documentary evidence that David came to Bruges in 1483, presumably from Haarlem, where he had formed his early style under the tuition of Ouwater; that he joined the gild of St Luke at Bruges in 1484 and became dean of the gild in 1501; that he married in 1496 Cornelia Cnoop, daughter of the dean of the Goldsmiths' gild; became one of the leading citizens of the town; died on the 13th of August 1523; and was buried in the Church of Our Lady at Bruges. In his early work he had followed the Haarlem tradition as represented by Dirck Bouts, Ouwater and Geertgen of Haarlem, but already gave evidence of his superior power as colourist. To this early period belong the "St John" of the Kaufmann collection in Berlin, and Mr Salting's "St Jerome." In Bruges he applied himself to the study and the copying of the masterpieces by the Van Eycks, Van der Weyden, and Van der Goes, and came under the direct influence of the master whom he followed most closely, Hans Memlinc. From him he acquired the soulful intensity of expression, the increased realism in the rendering of the human form and the orderly architectonic arrangement of the figures. Yet another master was to influence him later in life when, in 1515,

he visited Antwerp and became impressed with the life and movement of Quentin Matsys, who had introduced a more intimate and more human conception of sacred themes. David's "Pietà" in the National Gallery, and the "Descent from the Cross," in the Cavallo collection, Paris (Guildhall, 1906), were painted under this influence and are remarkable for their dramatic movement. But the works on which David's fame will ever rest most securely are the great altar-pieces executed by him before his visit to Antwerp—the "Marriage of St Catherine," at the National Gallery; the triptych of the "Madonna Enthroned and Saints" of the Brignole-Sale collection in Genoa; the "Annunciation" of the Sigmaringen collection; and, above all, the "Madonna with Angels and Saints" which he painted gratuitously for the Carmelite Nuns of Sion at Bruges, and which is now in the Rouen museum. Only a few of his works have remained in Bruges—"The Judgment of Cambyses," "The Flaying of Sisamnes" and the "Baptism of Christ" in the Town museum, and the "Transfiguration" in the Church of Our Lady. The rest were scattered all over the world, and to this may be due the oblivion into which his very name had fallen—partly to this, and partly to the fact that with all the beauty and soulfulness of his work he had no new page to add to the history of the progressive development of art, and even in his best work only gave new variations of the tunes sung by his great precursors and contemporaries. That he is worthy to rank among the masters was only revealed to the world when a considerable number of his paintings were assembled at Bruges on the occasion of the exhibition of early Flemish masters in 1902. At the time of his death the glory of Bruges, and also of the Bruges school, was on the wane, and Antwerp had taken the leadership in art as in political and commercial importance. Of David's pupils in Bruges, only Isenbrandt, A. Cornelis and Ambrosius Benson achieved importance. Among other Flemish painters Joachim Patinir and Mabuse were to some degree influenced by him.

Eberhard Freiherr von Bodenhausen published in 1905 a very comprehensive monograph on *Gerard David and his School* (Munich, F. Bruckmann), together with a *catalogue raisonné* of his works, which, after careful sifting, are reduced to the number of forty-three.

(P. G. K.)

DAVID, JACQUES LOUIS (1748-1825), French painter, was born in Paris on the 30th of April 1748. His father was killed in a duel, when the boy was but nine years old. His education was begun at the Collège des Quatre Nations, where he obtained a smattering of the classics; but, his artistic talent being already obvious, he was soon placed by his guardian in the studio of François Boucher. Boucher speedily realized that his own erotic style did not suit the lad's genius, and recommended him to J. M. Vien, the pioneer of the classical reaction in painting. Under him David studied for some years, and, after several attempts to win the *prix de Rome*, at last succeeded in 1775, with his "Loves of Antiochus and Stratonice." Vien, who had just been appointed director of the French Academy at Rome, carried the youth with him to that city. The classical reaction was now in full tide; Winckelmann was writing, Raphael Mengs painting; and the treasures of the Vatican galleries helped to confirm David in a taste already moulded by so many kindred influences. This severely classical spirit inspired his first important painting, "*Date obolum Belisario*," exhibited at Paris in 1780. The picture exactly suited the temper of the times, and was an immense success. It was followed by others, painted on the same principles, but with greater perfection of art: "The Grief of Andromache" (1783), "The Oath of the Horatii" (Salon, 1785), "The Death of Socrates," "Love of Paris and Helen" (1788), "Brutus" (1789). In the French drama an unimaginative imitation of ancient models had long prevailed; even in art Poussin and Le Sueur were successful by expressing a bias in the same direction; and in the first years of the revolutionary movement the fashion of imitating the ancients even in dress and manners went to the most extravagant length. At this very time David returned to Paris; he was now painter to the king, Louis XVI., who had been the purchaser of his principal works, and his popularity was soon immense. At the outbreak of the Revolution in 1789, David was carried away by the flood of enthusiasm that made all the intellect of France believe in a new era of equality and emancipation from all the ills of life.

The success of his sketch for the picture of the "Oath of the Tennis Court," and his pronounced republicanism, secured David's election to the Convention in September 1792, by the *Section du Muséum*, and he quickly distinguished himself by the defence of two French artists in Rome who had fallen into the merciless hands of the Inquisition. As, in this matter, the behaviour of the authorities of the French Academy in Rome had been dictated by the tradition of subservience to authority, he used his influence to get it suppressed. In the January following his election into the Convention his vote was given for the king's death. Thus the man who was so greatly indebted to the Roman academy and to Louis XVI. assisted in the destruction of both, no doubt in obedience to a principle, like the act of Brutus in condemning his sons—a subject he painted with all his powers. Cato and stoicism were the order of the day. Hitherto the actor had walked the stage in modern dress. Brutus had been applauded in red-heeled shoes and *culottes jarretées*; but Talma, advised by David, appeared in toga and sandals before an enthusiastic audience. At this period of his life Mademoiselle de Noailles persuaded him to paint a sacred subject, with Christ as the hero. When the picture was done, the Saviour was found to be another Cato. "I told you so," he replied to the expostulations of the lady, "there is no inspiration in Christianity now!" David's revolutionary ideas, which led to his election to the presidency of the Convention and to the committee of general security, inspired his pictures "Last Moments of Lepelletier de Saint-Fargeau" and "Marat Assassinated." He also arranged the programme of the principal republican festivals. When Napoleon rose to power David became his enthusiastic admirer. His picture of Napoleon on horseback pointing the way to Italy is now in Berlin. During this period he also painted the "Rape of the Sabines" and "Leonidas at Thermopylae." Appointed painter to the emperor, David produced the two notable pictures "The Coronation" (of Josephine) and the "Distribution of the Eagles."

On the return of the Bourbons the painter was exiled with the other remaining regicides, and retired to Brussels, where he again returned to classical subjects: "Amor quitting Psyche," "Mars disarmed by Venus," &c. He rejected the offer, made through Baron Humboldt, of the office of minister of fine arts at Berlin, and remained at Brussels till his death on the 29th of December 1825. His end was true to his whole career and

to his nationality. While dying, a print of the Leonidas, one of his favourite subjects, was submitted to him. After vaguely looking at it a long time, "*Il n'y a que moi qui pouvais concevoir la tête de Léonidas*," he whispered, and died. His friends and his party thought to carry the body back to his beloved Paris for burial, but the government of the day arrested the procession at the frontier, an act which caused some scandal, and furnished the occasion of a terrible song of Béranger's.

It is difficult for a generation which has witnessed another complete revolution in the standards of artistic taste to realize the secret of David's immense popularity in his own day. His style is severely academic, his colour lacking in richness and warmth, his execution hard and uninteresting in its very perfection. Subjects and treatment alike are inspired by the passing fashion of an age which had deceived itself into believing that it was living and moving in the spirit of classical antiquity. The inevitable reaction of the romantic movement made the masterpieces, which had filled the men of the Revolution with enthusiasm, seem cold and lifeless to those who had been taught to expect in art that atmosphere of mystery which in nature is everywhere present. Yet David was a great artist, and exercised in his day and generation a great influence. His pictures are magnificent in their composition and their draughtsmanship; and his keen observation and insight into character are evident, especially in his portraits, notably of Madame Récamier, of the Conventional Gérard and of Boissy d'Anglas.

See E. J. Delécluze, *Louis David, son école et son temps* (Paris, 1855), and *Le Peintre Louis David. Souvenirs et documents inédits*, by J. L. Jules David, the painter's grandson (Paris, 1880).

DAVID, PIERRE JEAN (1789-1856), usually called David d'Angers, French sculptor, was born at Angers on the 12th of March 1789. His father was a sculptor, or rather a carver, but he had thrown aside the mallet and taken the musket, fighting against the Chouans of La Vendée. He returned to his trade at the end of the civil war, to find his customers gone, so that young David was born into poverty. As the boy grew up his father wished to force him into some more lucrative and certain way of life. At last he succeeded in surmounting the opposition to his becoming a sculptor, and in his eighteenth year left for Paris to study the art upon a capital of eleven francs. After struggling against want for a year and a half, he succeeded in taking the prize at the École des Beaux-Arts. An annuity of 600 francs (£24) was granted by the municipality of his native town in 1809, and in 1811 David's "Epaminondas" gained the *prix de Rome*. He spent five years in Rome, during which his enthusiasm for the works of Canova was often excessive.

Returning from Rome about the time of the restoration of the Bourbons, he would not remain in the neighbourhood of the Tuileries, which swarmed with foreign conquerors and returned royalists, and accordingly went to London. Here Flaxman and others visited upon him the sins of David the painter, to whom he was erroneously supposed to be related. With great difficulty he made his way to Paris again, where a comparatively prosperous career opened upon him. His medallions and busts were in much request, and orders for monumental works also came to him. One of the best of these was that of Gutenberg at Strassburg; but those he himself valued most were the statue of Barra, a drummer boy who continued to beat his drum till the moment of death in the war in La Vendée, and the monument to the Greek liberator Bozzaris, consisting in a young female figure called "Reviving Greece," of which Victor Hugo said: "It is difficult to see anything more beautiful in the world; this statue joins the grandeur of Pheidias to the expressive manner of Puget." David's busts and medallions were very numerous, and among his sitters may be found not only the illustrious men and women of France, but many others both of England and Germany—countries which he visited professionally in 1827 and 1829. His medallions, it is affirmed, number 500. He died on the 4th of January 1856. David's fame rests firmly on his pediment of the Panthéon, his monument to General Gobert in Père Lachaise and his marble "Philopoemen" in the Louvre. In the Musée David at Angers is an almost complete collection of his works either in the form of copies or in the original moulds. As an example of his benevolence of character may be mentioned his rushing off to the sickbed of Rouget de Lisle, the author of the "Marseillaise Hymn," modelling and carving him in marble without delay, making a lottery of the work, and sending to the poet in the extremity of need the seventy-two pounds which resulted from the sale.

See H. Jouin, *David d'Angers et ses relations littéraires* (1890); *Lettres de P. J. David d'Angers à Louis Dupré* (Paris, 1891); *Collection de portraits des contemporains d'après les médaillons de P. J. David* (Paris, 1838).

DAVIDISTS, a fancy name rather than a recognized designation for three religious sects. It has been applied (1) to the followers (if he had any) of David of Dinant, in Belgium, the teacher or pupil of Amalric (Amaury) of Bena, both of whom taught apparently a species of pantheism. David's *Quaterni*, or *Quaternuli*, condemned and burnt at Paris (1209), is a lost book, known only by references in Albertus Magnus and Thomas Aquinas. Its author would have been burnt had he not fled. The name has been given (2) to the followers of David George or Joris (*q.v.*), and (3) to the followers of Francis Dávid (1510-1579), the apostle of Transylvanian unitarianism. (See Socinus, Unitarianism.)

DAVIDSON, ANDREW BRUCE (1831-1902), Scottish divine, was born in 1831 at Kirkhill in Aberdeenshire, where his father Andrew Davidson had a farm. The Davidsons belonged to the congregation of James Robertson (1803-1860) of Ellon, one of the ministers of Strathbogie Presbytery, which in the controversy which led to the disruption, resisted the "dangerous claims of the established church to self-government." When the disruption came the principles at stake were keenly canvassed in Ellon, and eventually Andrew Davidson, senior, went with the Free Church. In 1845 the boy, who had been a "herd" on the farm, went for six months to the grammar school at Aberdeen and was there prepared for a university bursary, which was sufficient to pay his fees, but no more. During his four years at the university his mother supplied him fortnightly with provisions from the farm; sometimes she walked the whole twenty miles from Kirkhill and handed the coach fee to her son. He graduated in 1849. At the university he had acquired a distrust of philosophy, and found it difficult to choose between mathematical and linguistic studies. A Free Church school having been opened in Ellon, he became master there for three years. Here he developed special aptitude for linguistic and philological studies. Besides Hebrew he taught himself French, German, Dutch, Italian and Spanish. In November 1852 he entered New College, Edinburgh. There he took the four years' theological course, and was licensed in 1856. For two years he preached occasionally and took vacancies. In 1858 the New College authorities appointed him assistant to the professor of Hebrew. He taught during the winter, and in the long vacation continued his preparation for his life work. One year he worked in Germany under Ewald, another year he went to Syria to study Arabic. In 1862 he published the first part of a commentary on Job. It was never finished and deals only with one-third of the book, but it is recognized as the first really scientific commentary on the Old Testament in the English language. In 1863 he was appointed by the general assembly professor of oriental languages at New College. He was junior colleague of Dr John Duncan (Rabbi Duncan) till 1870, and then for thirty years sole professor. He was a member of the Old Testament revision committee, and his work was recognized by several honorary distinctions, LL.D. (Aberdeen), D.D. (Edinburgh), Litt.D. (Cambridge). Among his students were Professors Elmslie, Skinner, Harper of Melbourne, Walker of Belfast, George Adam Smith of Glasgow and W. Robertson Smith. He understood it to be the first duty of an exegete to ascertain the meaning of the writer, and he showed that this could be done by the use of grammar and history and the historical imagination. He supplied guidance when it was much needed as to the methods and results of the higher criticism. Being a master of its methods, but very cautious in accepting assertions about its results, he secured attention early in the Free Church for scientific criticism, and yet threw the whole weight of his learning and his caustic wit into the argument against critical extravagance. He had thought himself into the ideas and points of view of the Hebrews, and his work in Old Testament theology is unrivalled. He excels as an expositor of the governing Hebrew ideas such as holiness, righteousness, Spirit of God, Messianism. In 1897 he was chosen moderator of the general assembly, but his health prevented his accepting the post. He died, unmarried, on the 26th of January 1902.

Besides the commentary on Job he published a book on the *Hebrew Accents*, the only Scottish performance of the kind since the days of Thomas Boston. His *Introductory Hebrew Grammar* has been widely adopted as a class-book in theological colleges. His *Hebrew Syntax* has the same admirable clearness, precision and teaching quality. His *Commentary on the Epistle to the Hebrews* is one of a series of handbooks for Bible classes. These were followed by commentaries on Job, Ezekiel, Nahum, Habakkuk and Zephaniah, in the Cambridge series; and a Bible-class primer on *The Exile and Restoration*. His lectures on *Old Testament Prophecy* were published after his death by Professor J. A. Paterson. The *Theology of the Old Testament* in the "International Theological Library" is a posthumous volume edited by Professor Salmond. "Isaiah" in the *Temple Bible* was finished, but not revised, when he died; and he also had in hand the volume on Isaiah for the *International Critical Commentary*; to which must be added a mass of articles contributed to *The Imperial Bible Dictionary*, *The Encyclopaedia Britannica*, and the chief religious reviews. Various articles in Dr Hastings' *Bible Dictionary* were by Davidson, especially the article "God." Two volumes of sermons, *The Called of God*, and *Waiting upon God*, were published from MS. after Davidson's death.

DAVIDSON, JOHN (1857-1909), British poet, playwright and novelist, son of the Rev. Alexander Davidson, a minister of the Evangelical Union, was born at Barrhead, Renfrewshire, Scotland, on the 11th of April 1857. After a schooling at the Highlanders' Academy, Greenock, at the age of thirteen he was set to work in that town, by helping in a sugar factory laboratory and then in the town analyst's office; and at fifteen he went back to his old school as a pupil-teacher. In 1876 he studied for a session at Edinburgh University, and then went as a master to various Scotch schools till 1890, varying his experiences in 1884 by being a clerk in a Glasgow thread firm. He had married in 1885, and meanwhile his literary inclinations had shown themselves, without attracting any public success, in the publication of his poetical and fantastic plays, *Bruce* (1886), *Smith; a tragic farce* (1888) and *Scaramouch in Naxos* (1889). Determining at all costs to follow his literary vocation, he went to London in 1890, but at first had a hard struggle. There his prose-romance *Perfervid* (1890) was published, one of the most original and fascinating stories of "young blood" and child adventure ever written, but for some reason it did not catch the public; and a sort of sequel in *The Great Men* (1891) met no better fate. He contributed, however, to newspapers and became known among literary journalists, and his volume of verse *In a Music-Hall* (1891) prepared the way for the genuine success two years later of his *Fleet Street Eclogues* (1893), which sounded a new and vigorous note and at once established his position among the younger generation of poets. He subsequently produced several more books in prose, romantic stories like *Baptist Lake* (1894) and *Earl Lavender* (1895), and an admirable piece of descriptive landscape writing in *A Random Itinerary* (1894); but his acceptance as a poet gave a more emphatic impulse to his work in verse, and most attention was given to the increasing proof of his powers shown in his *Ballads and Songs* (1894), *Second Series of Fleet Street Eclogues* (1895), *New Ballads* (1896), *The Last Ballad, &c.* (1898), all full of remarkably fresh and unconventional beauty. In spite of the strangely neglected genius of this early *Perfervid*, it is accordingly as a writer of verse rather than of prose-fiction that he occupies a leading place,

with a decided character of his own, in recent English literature, his revival of a modernized ballad form being a considerable achievement in itself, and his poems being packed with fine thought, robust and masterful in expression and imagery. Meanwhile in 1896 he produced an English verse adaptation, in *For the Crown* (acted by Forbes Robertson and Mrs Patrick Campbell), of François Coppée's drama *Pour la couronne*, which had considerable success and was revived in 1905; and he wrote several other literary plays, remarkable none the less for dramatic qualities,—*Godfrida* (1898), *Self's the Man* (1901), *The Knight of the Maypole* (1902) and *The Theatrocrat* (1905), in the last of which a tendency to be extraordinary is rather too manifest. This tendency was not absent from his volume of *Holiday and Other Poems* (1906), containing many fine things, together with an "essay on blank verse" illustrated from his own compositions, the outspoken criticisms of a writer of admitted originality and insight, but not devoid of eccentric volubility. But if the identification of "eccentricity" and "greatness" by Cosmo Mortimer in Mr Davidson's own *Perfervid* sometimes obtrudes itself on the memory in considering his more peculiarly "robust" and somewhat volcanic deliverances, no such objection can detract from the genuine inspiration of his best work, in which the true poetic afflatus is unmistakable. This is to be found in his poems published from 1893 to 1898, five years during which his reputation steadily and deservedly grew,—the *Fleet Street Eclogues*, with their passionate modern criticism of life combined with their breath of rural beauty, and such intense ballads as those "Of a Nun," and "Of Heaven and Hell." In his ethical and didactic utterances, *The Testament of a Vivisector* and *The Testament of a Man Forbid* (1901), *The Testament of an Empire Builder* (1902), *Mammon and his Message* (1908), &c., the fine quality of the verse is wedded with a certain fervid satirical journalism of subject, less admirable than the detachment of thought in the earlier volumes. In later years he lived at Penzance, provided with a small Civil List pension, but otherwise badly off, for his writings brought in very little money. On March 23rd, 1909, he disappeared, in circumstances pointing to suicide, and six months later his body was found in the sea.

See an article by Filson Young on "The New Poetry," in the *Fortnightly Review*, January 1909.

DAVIDSON, RANDALL THOMAS (1848-), archbishop of Canterbury, son of Henry Davidson, of Muirhouse, Edinburgh, was born in Edinburgh and educated at Harrow and Trinity College, Oxford. He took orders in 1874 and held a curacy at Dartford, in Kent, till 1877, when he became resident chaplain and private secretary to Dr Tait, archbishop of Canterbury, a position which he occupied till Dr Tait's death, and retained for a short time (1882-1883) under his successor Dr Benson. He married in 1878 Edith, the second daughter of Archbishop Tait, whose *Life* he eventually wrote (1891). In 1882 he became honorary chaplain and sub-almoner to Queen Victoria, and in the following year was appointed dean of Windsor, and domestic chaplain to the queen. His advice upon state matters was constantly sought by the queen and greatly valued. From 1891 to 1903 he was clerk of the closet, first to Queen Victoria and afterwards to King Edward VII. He was made bishop of Rochester in 1891, and was translated to Winchester in 1895. In 1903 he succeeded Temple as archbishop of Canterbury. The new archbishop, without being one of the English divines who have made notable contributions to theological learning, already had a great reputation for ecclesiastical statesmanship; and in subsequent years his diplomatic abilities found ample scope in dealing not only with the difficulties caused in the church by doctrinal questions, but pre-eminently with the education crisis, and with the new problems arising in the enlarged Anglican Communion. As the chief representative of the Church of England in the House of Lords, his firmness, combined with broadmindedness, in regard to the attitude of the nonconformists towards denominational education, made his influence widely felt. In 1904 he visited Canada and the United States, and was present at the triennial general convention of the Protestant Episcopal Church of the United States and Canada. In 1908 he presided at the Pan-Anglican congress held in London, and at the Lambeth conference which followed. He had edited in 1889 *The Lambeth Conferences*, an historical account of the conferences of 1867, 1878 and 1888, giving the official reports and resolutions, and the sermons preached on these occasions.

DAVIDSON, SAMUEL (1807-1898), Irish biblical scholar, was born near Ballymena in Ireland. He was educated at the Royal College of Belfast, entered the Presbyterian ministry in 1835, and was appointed professor of biblical criticism at his own college. Becoming a Congregationalist, he accepted in 1842 the chair of biblical criticism, literature and oriental languages at the Lancashire Independent College at Manchester; but he was obliged to resign in 1857, being brought into collision with the college authorities by the publication of an introduction to the Old Testament entitled *The Text of the Old Testament, and the Interpretation of the Bible*, written for a new edition of Horne's *Introduction to the Sacred Scripture*. Its liberal tendencies caused him to be accused of unsound views, and a most exhaustive report prepared by the Lancashire College committee was followed by numerous pamphlets for and against. After his resignation a fund of £3000 was subscribed as a testimonial by his friends. In 1862 he removed to London to become scripture examiner in London University, and he spent the rest of his life in literary work. He died on the 1st of April 1898. Davidson was a member of the Old Testament Revision Committee. Among his principal works are:—*Sacred Hermeneutics Developed and Applied* (1843), rewritten and republished as *A Treatise on Biblical Criticism* (1852), *Lectures on Ecclesiastical Polity* (1848), *An Introduction to the New Testament* (1848-1851), *The Hebrew Text of the Old Testament Revised* (1855), *Introduction to the Old Testament* (1862), *On a Fresh Revision of the Old Testament* (1873), *The Canon of the Bible* (1877), *The Doctrine of Last Things in the New Testament* (1883), besides translations of the New Testament from Von Tischendorf's text, Gieseler's *Ecclesiastical History* (1846) and Fürst's *Hebrew and Chaldee Lexicon*.

DAVIDSON, THOMAS (1817-1885), British palaeontologist, was born in Edinburgh on the 17th of May 1817. His parents possessed considerable landed property in Midlothian. Educated partly in the university at Edinburgh and partly in France, Italy and Switzerland, and early acquiring an interest in natural history, he benefited greatly by acquaintance with foreign languages and literature, and with men of science in different countries. He was induced in 1837, through the influence of Leopold von Buch, to devote his special attention to the brachiopoda, and in course of time he became the highest authority on this group. The great task of his life was the *Monograph of British Fossil Brachiopoda*, published by the Palaeontographical Society (1850-1886). This work, with supplements, comprises six quarto volumes with more than 200 plates drawn on stone by the author. He also prepared an exhaustive memoir on "Recent Brachiopoda," published by the Linnean Society. He was elected F.R.S. in 1857. He was awarded in 1865 the Wollaston medal by the Geological Society of London, and in 1870 a Royal medal by the Royal Society; and in 1882 the degree of LL.D. was conferred upon him by the university of St Andrews. He died at Brighton on the 14th of October 1885, bequeathing his fine collection of recent and fossil brachiopoda to the British Museum.

See biography with portrait and list of papers in *Geol. Mag.* for 1871, p. 145.

DAVIES, DAVID CHARLES (1826-1891), Welsh nonconformist divine, was born at Aberystwyth on the 11th of May 1826, his father being a merchant and a pioneer of Welsh Methodism, his mother a niece of Thomas Charles (*q.v.*) of Bala. He was educated in his native town by a noted schoolmaster, John Evans, at Bala College, and at University College, London, where he graduated B.A. in 1847 and M.A. (in mathematics) in 1849. He had already begun to preach, and after an evangelistic tour in South Wales supplied the pulpit of the English presbyterian church at Newtown for six months, and settled as pastor of the bilingual church at Builth in 1851. He returned to this charge after a pastorate at Liverpool (1853-1856), left it again in 1858 for Newtown, and went in May 1859 to the Welsh church at Jewin Crescent, London. Here he remained until 1876, and from that date till 1882, although living at Bangor for reasons of health, had the chief oversight of the church. In 1888 he accepted the principalship of the Calvinistic Methodist College at Trevecca in Brecknockshire. His work here was successful, but short; he died at Bangor on the 26th of September 1891, and was buried at Aberystwyth.

Though Davies stood somewhat apart from the main currents of thought both without and within his church, and was largely unknown to English audiences or readers, he exercised a strong influence on Welsh life and thought in the 19th century. He was a serious student, especially of anti-theistic positions, a good speaker, and a frequent contributor to Welsh theological journals. Several of his articles have been collected and published, the most noteworthy being expositions on *The First Epistle of John* (1889), *Ephesians* (2 vols., 1896, 1901), *Psalms* (1897), *Romans* (1902); and *The Atonement and Intercession of Christ* (1899, English trans. by D. E. Jenkins, 1901).

DAVIES, SIR JOHN (1569-1626), English philosophical poet, was baptized on the 16th of April 1569, at Tisbury, Wiltshire, where his parents lived at the manor-house of Chicksgrove. He was educated at Winchester College, and became a commoner of Queen's College, Oxford, in 1585. In 1588 he entered the Middle Temple, and was called to the bar in 1595. In his general onslaught on literature in 1599 the archbishop of Canterbury ordered to be burnt the notorious and now excessively rare volume, *All Ovid's Elegies, 3 Bookes, by C. M. Epigrams by J. D.* (Middleburgh, 1598?), which contained posthumous work by Marlowe. The epigrams by Davies, although not devoid of wit, were coarse enough to deserve their fate. It is probable that they were earlier in date of composition than the charming fragment entitled *Orchestra* (1596), written in praise of dancing. The poet, in the person of Antinoüs, tries to induce Penelope to dance by arguing that all harmonious natural processes partake of the nature of a conscious and well-ordered dance. He closes his argument by foreshadowing in a magic mirror the revels of the court of Cynthia (Elizabeth). *Orchestra* was dedicated to the author's "very friend, Master Richard Martin," but in the next year the friends quarrelled, and Davies was expelled from the society for having struck Martin with a cudgel in the hall of the Middle Temple. He spent the year after his expulsion at Oxford in the composition of his philosophical poem on the nature of the soul and its immortality—*Nosce teipsum* (1599). The style of the work was entirely novel; and the stanza in which it was written—the decasyllabic quatrain with alternate rhymes—had never been so effectively handled. Its force, eloquence and ingenuity, the orderly and lucid arrangement of its matter, place it among the finest of English didactic poems. In 1599 he also published a volume of twenty-six graceful acrostics on the words *Elisabetha Regina*, entitled *Hymns to Astraea*. He produced no more poetry except his contributions to Francis Davison's *Poetical Rhapsody* (1608). These were two dialogues which had been written as entertainments for the queen, and "Yet other Twelve Wonders of the World," satirical epigrams on the courtier, the divine, the maid, &c., and "A Hymn in praise of Music." Ten sonnets to Philomel are signed J. D., and are assigned to Davies (*Poetical Rhapsody*, ed. A. H. Bullen, 1890). In 1601 Davies was restored to his position at the bar, after making his apologies to Martin, and in the same year he sat for Corfe Castle in

parliament. James I. received the author of *Nosce teipsum* with great favour, and sent him (1603) to Ireland as solicitor-general, conferring the honour of knighthood upon him in the same year. In 1606 he was promoted to be attorney-general for Ireland, and created serjeant-at-arms. Of the difficulties in the way of the prosecution of his work, and his untiring industry in overcoming them, there is abundant evidence in his letters to Cecil preserved in the *State Papers on Ireland*. One of his chief aims was to establish the Protestant religion firmly in Ireland, and he took strict measures to enforce the law for attendance at church. With the same end in view he took an active part in the "plantation" of Ulster. In 1612 he published his prose *Discoverie of the true causes why Ireland was never entirely subdued untill the beginning of his Majestie's happie raigne*.[1] In the same year he entered the Irish parliament as member for Fermanagh, and was elected speaker after a scene of disorder in which the Catholic nominee, Sir John Everard, who had been installed, was forcibly ejected. In the capacity of speaker he delivered an excellent address reviewing previous Irish parliaments. He resigned his Irish offices in 1619, and sat in the English parliament of 1621 for Newcastle-under-Lyme. With Sir Robert Cotton he was one of the founders of the Society of Antiquaries. He was appointed lord chief justice in 1626, but died suddenly (December 8th) before he could enter on the office. He had married (1609) Eleanor Touchet, daughter of George, Baron Audley. She developed eccentricity, verging on madness, and wrote several fanatical books on prophecy.

In 1615 Davies published at Dublin *Le Primer Discours des Cases et Matters in Ley resolues et adjudges en les Courts del Roy en cest Realme* (reprinted 1628). He issued an edition of his poems in 1622. His prose publications were mainly posthumous. *The Question concerning Impositions, Tonnage, Poundage ...* was printed in 1656, and four of the tracts relating to Ireland, with an account of Davies and his services to that country, were edited by G. Chalmers in 1786. His works were edited by Dr A. B. Grosart (3 vols. 1869-1876), with a full biography, for the Fuller Worthies Library.

He is not to be confounded with another poet, John Davies of Hereford (1565?-1618), among whose numerous volumes of verse may be mentioned *Mirum in modum* (1602), *Microcosmus* (1603), *The Holy Roode* (1609), *Wittes Pilgrimage* (*c.* 1610), *The Scourge of Folly* (*c.* 1611), *The Muses Sacrifice* (1612) and *Wittes Bedlam* (1607); his *Scourge of Folly* contains verses addressed to many of his contemporaries, to Shakespeare among others; he also wrote *A Select Second Husband for Sir Thomas Overbury's Wife* (1616), and *The Writing Schoolmaster* (earliest known edition, 1633); his works were collected by Dr A. B. Grosart (2 vols., 1873) for the Chertsey Worthies Library.

1 Edited by Henry Morley in his *Ireland under Elizabeth and James I.* (1890).

DAVIES (Davisius), **JOHN** (1679-1732), English classical scholar and critic, was born in London on the 22nd of April 1679. He was educated at Charterhouse and Queens' College, Cambridge, of which society he was elected fellow (July 7th, 1701). He subsequently became rector of Fen Ditton, prebendary of Ely, and president of his college. He died on the 7th of March 1731-1732, and was buried in the college chapel. Davies was considered one of the best commentators on Cicero, his attention being chiefly devoted to the philosophical works of that author. Amongst these he edited the *Tusculanae disputationes* (1709), *De natura deorum* (1718), *De divinatione* and *De fato* (1725), *Academica* (1725), *De legibus* (1727), *De finibus* (1728). His nearly finished notes on the *De officiis* he bequeathed to Dr Richard Mead, with a view to their publication. Mead, finding himself unable to carry out the undertaking, transferred the notes to Thomas Bentley (nephew of the famous Richard Bentley), by whose carelessness they were burnt. Davies's editions, which were intended to supplement those of Graevius, show great learning and an extensive knowledge of the history and systems of philosophy, but he allows himself too much licence in the matter of emendation. He also edited Maximus of Tyre's *Dissertationes* (1703); the works of Caesar (1706); the *Octavius* of Minucius Felix (1707); the *Epitome divinarum institutionum* of Lactantius (1718). Although on intimate terms with Richard Bentley, he found himself unable to agree with the great scholar in regard to his dispute with Trinity College.

DAVIES, SIR LOUIS HENRY (1845-), Canadian politician and jurist, was born in Prince Edward Island in 1845, of Huguenot descent. From 1869 to 1879 he took part in local politics, and was premier from 1876-1879; in 1882 he entered the Canadian parliament as a Liberal, and from 1896 to 1901 was minister of marine and fisheries. In the latter year he became one of the judges of the supreme court of Canada. In 1877 he was counsel for Great Britain before the Anglo-American fisheries arbitration at Halifax; in 1897 he was a joint delegate to Washington with Sir Wilfrid Laurier on the Bering Sea seal question; and in 1898-1899 a member of the Anglo-American joint high commission at Quebec.

DAVIES, RICHARD (*c.* 1505-1581), Welsh bishop and scholar, was born in North Wales, and was educated at New Inn Hall, Oxford, becoming vicar of Burnham, Buckinghamshire, in 1550. Being a reformer he took refuge at Geneva during the reign of Mary, returning to England and to parochial work after the accession of

Elizabeth in 1558. His connexion with Wales was renewed almost at once; for, after serving on a commission which visited the Welsh dioceses, he was, in January 1560, consecrated bishop of St Asaph, whence he was translated, early in 1561, to the bishopric of St Davids. As a bishop Davies was an earnest reformer, very industrious, active and liberal, but not very scrupulous with regard to the property of the church. He was a member of the council of Wales, was very friendly with Matthew Parker, archbishop of Canterbury, and was regarded both by Parker and by William Cecil, Lord Burghley, as a trustworthy adviser on Welsh concerns. Another of the bishop's friends was Walter Devereux, first earl of Essex. Assisting William Salisbury, Davies took part in translating the New Testament into Welsh, and also did some work on the Welsh translation of the Book of Common Prayer. He helped to revise the "Bishops' Bible" of 1568, being himself responsible for the book of Deuteronomy, and the second book of Samuel. He died on the 7th of November 1581, and was buried in Abergwili church.

DAVILA, ENRICO CATERINO (1576-1631), Italian historian, was descended from a Spanish noble family. His immediate ancestors had been constables of the kingdom of Cyprus for the Venetian republic since 1464. But in 1570 the island was taken by the Turks; and Antonio Davila, the father of the historian, had to leave it, despoiled of all he possessed. He travelled into Spain and France, and finally returned to Padua, and at Sacco on the 30th of October 1576 his youngest son, Enrico Caterino, was born. About 1583 Antonio took this son to France, where he became a page in the service of Catherine de' Medici, wife of King Henry II. In due time he entered the military service, and fought through the civil wars until the peace in 1598. He then returned to Padua, where, and subsequently at Parma, he led a studious life until, when war broke out, he entered the service of the republic of Venice and served with distinction in the field. But during the whole of this active life, many details of which are very interesting as illustrative of the life and manners of the time, he never lost sight of a design which he had formed at a very early period, of writing the history of those civil wars in France in which he had borne a part, and during which he had had so many opportunities of closely observing the leading personages and events. This work was completed about 1630, and was offered in vain by the author to all the publishers in Venice. At last one Tommaso Baglíoni, who had no work for his presses, undertook to print the manuscript, on condition that he should be free to leave off if more promising work offered itself. The printing of the *Istoria delle guerre civili di Francia* was, however, completed, and the success and sale of the work were immediate and enormous. Over two hundred editions followed, of which perhaps the best is the one published in Paris in 1644. Davila was murdered, while on his way to take possession of the government of Cremona for Venice in July 1631, by a ruffian, with whom some dispute seems to have arisen concerning the furnishing of the relays of horses ordered for his use by the Venetian government.

The *Istoria* was translated into French by G. Baudouin (Paris, 1642); into Spanish by Varen de Soto (Madrid, 1651, and Antwerp, 1686); into English by W. Aylesbury (London, 1647), and by Charles Cotterel (London, 1666), and into Latin by Pietro Francesco Cornazzano (Rome, 1745). The best account of the life of Davila is that by Apostolo Zeno, prefixed to an edition of the history printed at Venice in 2 vols. in 1733. Peter Bayle is severe on certain historical inaccuracies of Davila, and it is true that Davila must be read with due remembrance of the fact that he was not only a Catholic but the especial protégé of Catherine de' Medici, but it is not to be forgotten that Bayle was as strongly Protestant.

DAVIS, ANDREW JACKSON (1826-1910), American spiritualist, was born at Blooming Grove, Orange county, New York, on the 11th of August 1826. He had little education, though probably much more than he and his friends pretended. In 1843 he heard lectures in Poughkeepsie on "animal magnetism," as the phenomena of hypnotism was then termed, and found that he had remarkable clairvoyant powers; and in the following year he had, he said, spiritual messages telling him of his life work. For the next three years (1844-1847) he practised magnetic healing with much success; and in 1847 he published *The Principles of Nature, Her Divine Revelations*, and a *Voice to Mankind*, which in 1845 he had dictated while in a trance to his "scribe," William Fishbough. He lectured with little success and returned to writing (or "dictating") books, publishing about thirty in all, including *The Great Harmonia* (1850-1861), an "encyclopaedia" in six volumes; *The Philosophy of Special Providences* (1850), which with its evident rehash of old arguments against special providences and miracles would seem to show that Davis's inspiration was literary; *The Magic Staff: an Autobiography* (1857), which was supplemented by *Arabula: or the Divine Guest, Containing a New Collection of New Gospels* (1867), the gospels being those "according to" St Confucius, St John (G. Whittier), St Gabriel (Derzhavin), St Octavius (Frothingham), St Gerrit (Smith), St Emma (Hardinge), St Ralph (W. Emerson), St Seiden (J. Finney), St Theodore (Parker), &c.; and *A Stellar Key to the Summer Land* (1868) and *Views of Our Heavenly Home* (1878), each with illustrative diagrams. Davis was much influenced by Swedenborg and by the Shakers, who reprinted his panegyric of Ann Lee in an official *Sketch of Shakers and Shakerism* (1884).

DAVIS, CHARLES HOWARD (1857-), American landscape painter, was born at East Cambridge,

Massachusetts, on the 2nd of February 1857. A pupil of the schools of the Boston Museum of Fine Arts, he was sent to Paris in 1880. Having studied at the Academy Julian under Lefebvre and Boulanger, he went to Barbizon and painted much in the forest of Fontainebleau under the traditions of the “men of thirty.” He became a full member of the National Academy of Design in 1906, and received many awards, including a silver medal at the Paris Exhibition of 1889. He is represented by important works in the Metropolitan Museum of Art, New York; the Corcoran Art Gallery, Washington; the Pennsylvania Academy, Philadelphia, and the Boston Museum of Fine Arts.

DAVIS, CUSHMAN KELLOGG (1838-1900), American political leader and lawyer, was born in Henderson, New York, on the 16th of June 1838. He was taken by his parents to Wisconsin Territory in the year of his birth, and was educated at Carroll College, Waukesha, Wisconsin, and at the university of Michigan, from which he graduated in 1857. After studying law in the office of Alexander W. Randall, he was admitted to the bar in 1860. During the Civil War, as a first lieutenant of Federal volunteers, he served in the western campaigns of 1862 and 1863, and in 1864 was an aide to General Willis A. Gorman (1814-1876). Resigning his commission (1864) on account of ill-health, he soon settled in St Paul, Minnesota, where he practised law in partnership with General Gorman, and soon became prominent both at the bar and, as a Republican, in politics. He served in the state House of Representatives in 1867, 1868-1873 was United States district attorney for Minnesota. In 1874-1876 he was governor of the state, and from 1887 until his death was a member of the United States Senate. In the Senate he was one of the acknowledged leaders of his party, an able and frequent speaker and a committee worker of great industry. In March 1897 he became chairman of the committee on foreign relations at a time when its work was peculiarly influential in shaping American foreign policy. His extensive knowledge of international law, and his tact and diplomacy, enabled him to render services of the utmost importance in connexion with the Spanish-American War, and he was one of the peace commissioners who negotiated and signed the treaty of Paris by which the war was terminated. He died at St Paul on the 27th of November 1900. Few public men in the United States since the Civil War have combined skill in diplomacy, constructive statesmanship, talent for political organization, oratorical ability and broad culture to such a degree as Senator Davis. In addition to various speeches and public addresses, he published an essay entitled *The Law of Shakespeare* (1899).

DAVIS, HENRY WILLIAM BANKS (1833-), English painter, received his art training in the Royal Academy schools, where he was awarded two silver medals. He was elected an associate of the Academy in 1873, and academician in 1877. He made a considerable reputation as an accomplished painter of quiet pastoral subjects and carefully elaborated landscapes with cattle. His pictures, “Returning to the Fold” (1880), and “Approaching Night” (1899), bought for the Chantrey Fund Collection, are now in the National Gallery of British Art (Tate Gallery).

DAVIS, HENRY WINTER (1817-1865), American political leader, was born at Annapolis, Maryland, on the 16th of August 1817. His father, Rev Henry Lyon Davis (1775-1836), was a prominent Protestant Episcopal clergyman of Maryland, and for some years president of St John’s College at Annapolis. The son graduated at Kenyon College, Gambier, Ohio, in 1837, and from the law department of the university of Virginia in 1841, and began the practice of law in Alexandria, Virginia, but in 1850 removed to Baltimore, Maryland, where he won a high position at the bar. Early becoming imbued with strong anti-slavery views, though by inheritance he was himself a slave holder, he began political life as a Whig, but when the Whig party disintegrated, he became an “American” or “Know-Nothing,” and as such served in the national House of Representatives from 1855 to 1861. By his independent course in Congress he won the respect and esteem of all political groups. In the contest over the speakership at the opening of the Thirty-Sixth Congress (1859) he voted with the Republicans, thereby incurring a vote of censure from the Maryland legislature, which called upon him to resign. In 1860, not being quite ready to ally himself wholly with the Republican party, he declined to be a candidate for the Republican nomination for the vice-presidency, and supported the Bell and Everett ticket. He was himself defeated in this year for re-election to Congress. In the winter of 1860-1861 he was active on behalf of compromise measures. Finally, after President Lincoln’s election, he became a Republican, and as such was re-elected in 1862 to the national House of Representatives, in which he at once became one of the most radical and aggressive members, his views commanding especial attention owing to his being one of the few representatives from a slave state. From December 1863 to March 1865 he was chairman of the committee on foreign affairs; as such, in 1864, he was unwilling to leave the delicate questions concerning the French occupation of Mexico entirely in the hands of the president and his secretary of state, and brought in a report very hostile to France, which was adopted in the House, but fortunately, as it proved later, was not adopted by the Senate. With other radical Republicans Davis was a bitter opponent of Lincoln’s plan for the reconstruction of the Southern States, and on the 15th of February 1864 he reported from committee a bill placing the process of reconstruction under the control of Congress, and stipulating that the Confederate States, before resuming their former status in the Union, must disfranchise all important civil and military

officers of the Confederacy, abolish slavery, and repudiate all debts incurred by or with the sanction of the Confederate government. In his speech supporting this measure Davis declared that until Congress should "recognize a government established under its auspices, there is no government in the rebel states save the authority of Congress." The bill—the first formal expression by Congress with regard to Reconstruction—did not pass both Houses until the closing hours of the session, and failed to receive the approval of the president, who on the 8th of July issued a proclamation defining his position. Soon afterwards, on the 5th of August 1864, Davis joined Benjamin F. Wade of Ohio, who had piloted the bill through the Senate, in issuing the so-called "Wade-Davis Manifesto," which violently denounced President Lincoln for encroaching on the domain of Congress and insinuated that the presidential policy would leave slavery unimpaired in the reconstructed states. In a debate in Congress some months later he declared, "When I came into Congress ten years ago this was a government of law. I have lived to see it a government of personal will." He was one of the radical leaders who preferred Frémont to Lincoln in 1864, but subsequently withdrew his opposition and supported the President for re-election. He early favoured the enlistment of negroes, and in July 1865 publicly advocated the extension of the suffrage to them. He was not a candidate for re-election to Congress in 1864, and died in Baltimore, Maryland, on the 30th of December 1865. Davis was a man of scholarly tastes, an orator of unusual ability and great eloquence, tireless and fearless in fighting political battles, but impulsive to the verge of rashness, impractical, tactless and autocratic. He wrote an elaborate political work entitled *The War of Ormuzd and Ahriman in the Nineteenth Century* (1853), in which he combated the Southern contention that slavery was a divine institution.

See *The Speeches of Henry Winter Davis* (New York, 1867), to which is prefixed an oration on his life and character delivered in the House of Representatives by Senator J. A. J. Creswell of Maryland.

DAVIS, JEFFERSON (1808-1889), American soldier and statesman, president of the Confederate states in the American Civil War, was born on the 3rd of June 1808 at what is now the village of Fairview, in that part of Christian county, Kentucky, which was later organized as Todd county. His father, Samuel Davis (1756-1824), who served in the War of Independence, was of Welsh, and his mother, Jane Cook, of Scotch-Irish descent; during his infancy the family moved to Wilkinson county, Mississippi. Jefferson Davis was educated at Transylvania University (Lexington, Kentucky) and at the United States Military Academy at West Point. From the latter he graduated in July 1828, and became by brevet a second lieutenant of infantry. He was assigned for duty to Jefferson Barracks at St Louis, and on reaching this post was ordered to Fort Crawford, near Prairie du Chien, Wisconsin. In 1833 he took part in the closing scenes of the Black Hawk War, was present at the capture of Black Hawk, and was sent to Dixon, Illinois, to muster into service some volunteers from that state. Their captain was Abraham Lincoln, and Lieutenant Davis is said to have administered to him his first oath of allegiance. In June 1835 he resigned from the army, married Miss Knox Taylor, daughter of Colonel (later General) Zachary Taylor, and became a cotton planter in Warren county, Miss. In September of the same year, while visiting in Louisiana to escape the fever, his wife died of it and Davis himself was dangerously ill. For the next few months he travelled to regain his health; and in the spring of 1836 returned to his cotton plantation, where for several years he devoted his time largely to reading political philosophy, political economy, public law and the English classics, and by careful management of his estate he acquired considerable wealth. In 1843 Davis entered the field of politics as a Democrat, and exhibited great power as a public speaker. In 1844 he was chosen as a presidential elector on the Polk and Dallas ticket; in February 1845 he married Miss Varina Howell (1826-1906) of Mississippi (a granddaughter of Governor Richard Howell of New Jersey), and in the same year became a Democratic representative in Congress. From the beginning of his political career he advocated a strict construction of the Federal constitution. He was an ardent admirer of John C. Calhoun, and eventually became his successor as the leader of the South. In his rare speeches in the House of Representatives he clearly defined his position in regard to states rights, which he consistently held ever afterwards. During his first session, war with Mexico was declared, and he resigned his seat in June 1846 to take command of the first regiment raised in his state—the Mississippi Rifles. He served in the Northern Campaign under his father-in-law, General Taylor, and was greatly distinguished for gallantry and soldierly conduct at Monterey and particularly at Buena Vista, where he was severely wounded early in the engagement, but continued in command of his regiment until victory crowned the American arms. While still in the field he was appointed (May 1847) by President Polk to be brigadier-general of volunteers; but this appointment Davis declined, on the ground, as he afterwards said, "that volunteers are militia and the Constitution reserves to the state the appointment of all militia officers." Afterwards, Davis himself, as president of the Confederate States, was to appoint many volunteer officers.

Upon his return to his home late in 1847 he was appointed to fill a vacancy in the United States Senate, and in 1850 he was elected for a full term of six years. He resigned in 1851, but was again elected in 1857, and continued as a member from that year until the secession of his State in 1861. As a senator he stood in the front rank in a body distinguished for ability; his purity of character and courteous manner, together with his intellectual gifts, won him the esteem of all parties; and he became more and more the leader of the Southern Democrats. He was, however, possessed of a logical rather than an intuitive mind. In his famous speech in the Senate on the 12th of July 1848, on the question of establishing a government for Oregon Territory, he held that a slave should be treated by the Federal government on the same basis as any other property, and therefore that it was the duty of Congress to protect the owner's right to his slave in whatever state or territory of the Union that slave might be. In the debates on the Compromise Measures of 1850 he took an active part, strongly opposing these measures, while Henry Stuart Foote (1800-1880), the other Mississippi senator, was one of their leading advocates. But although still holding to the theory expounded in his July speech of 1848, he was now ready with the proposal that slavery might be prohibited north of latitude 36° 30′ N. provided it should not be interfered with in any territory south of that line. He resigned from the Senate in 1851 to become a candidate of the Democratic States-Rights party for the governorship of his state against

Foote, the candidate of the Union Democrats. In the campaign he held, in opposition to the wishes of the more radical members of his party, that although secession might be resorted to as a last alternative the circumstances were not yet such as to justify it. A temporary loss of eyesight interfered with his canvass, and he was defeated by a small majority (1009), the campaign having been watched with the greatest interest throughout the country. In 1853 he accepted the position of secretary of war in the cabinet of President Pierce, and for four years performed the duties of the office with great distinction and with lasting benefit to the nation. He organized the engineer companies which explored and reported on the several proposed routes for a railway connecting the Mississippi valley with the Pacific Ocean; he effected the enlargement of the army, and made material changes in its equipment of arms and ammunition, utilizing the latest improvements; he made his appointments of subordinates on their merits, regardless of party considerations; he revised the system of tactics, perfected the signal corps service, and enlarged the coast and frontier defences of the country. During all this time he was on terms of intimate friendship with the president, over whom he undoubtedly exerted a powerful, but probably not, as is often said, a dominating influence; for instance he is generally supposed to have won the president's support for the Kansas-Nebraska Bill of 1854. After the passage of this bill, Davis, who as secretary of war had control of the United States troops in Kansas, sympathized strongly with the pro-slavery party there. At the end of his service in the cabinet, he was returned to the Senate. To his insistence in 1860 that the Democratic party should support his claim to the protection of slavery in the territories by the Federal government, the disruption of that party was in large measure due. At the same time he practically told the Senate that the South would secede in the event of the election of a radical Republican to the presidency; and on the 10th of January 1861, not long after the election of Lincoln, he argued before that body the constitutional right of secession and declared that the treatment of the South had become such that it could no longer remain in the Union without being degraded. When his state had passed the ordinance of secession he resigned his seat, and his speech on the 21st of January was a clear and able statement of the position taken by his state, and a most pathetic farewell to his associates.

On the 25th of January 1861 Davis was commissioned major-general of the forces Mississippi was raising in view of the threatened conflict. On the 9th of February he received the unanimous vote of the Provisional Congress of the seceded states as president of the "Confederate States of America." He was inaugurated on the 18th of February, was subsequently, after the adoption of the permanent constitution, regularly elected by popular vote, for a term of six years, and on the 22nd of February 1862 was again inaugurated. He had not sought the office, preferring service in the field. His brilliant career, both as a civilian and as a soldier, drew 868
all eyes to him as best fitted to guide the fortunes of the new Confederacy, and with a deep sense of the responsibility he obeyed the call. He heartily approved of the peace conference, which attempted to draw up a plan of reconciliation between the two sections, but whose failure made war inevitable. Montgomery, in Alabama, was the first Confederate capital, but after Virginia joined her sister states, the seat of government was removed to Richmond, on the 29th of May 1861. How Davis—of whom W. E. Gladstone, in the early days of English sympathy with the South, said that he had "made a nation"—bore himself in his most responsible position during the gigantic conflict which ensued, cannot here be related in detail. (See Confederate States; and American Civil War.) In the shortest time he organized and put into the field one of the finest bodies of soldiers of which history has record. Factories sprang up in the South in a few months, supplying the army with arms and munitions of war, and the energy of the president was everywhere apparent. That he committed serious errors, his warmest admirers will hardly deny. Unfortunately his firmness developed into obstinacy, and exhibited itself in continued confidence in officers who had proved to be failures, and in dislike of some of his ablest generals. He committed the great mistake, too, of directing the movements of distant armies from the seat of government, though those armies were under able generals. This naturally caused great dissatisfaction, and more than once resulted in irreparable disaster. Moreover, he was not, like Lincoln, a great manager of men; he often acted without tact; he was charged with being domineering and autocratic, and at various times he was seriously hampered by the meddling of the Confederate Congress and the opposition of such men as the vice-president, A. H. Stephens, Governor Joseph E. Brown of Georgia, and Governor Zebulon Vance of North Carolina.

During the winter of 1864-1865 the resources of the government showed such exhaustion that it was apparent that the end would come with the opening of the spring campaign. This was clearly stated in the reports of the heads of departments and of General Lee. President Davis, however, acted as if he was assured of ultimate success. He sent Duncan F. Kenner as special commissioner to the courts of England and France to obtain recognition of the Confederacy on condition of the abolition of slavery. When a conference was held in Hampton Roads on the 3rd of February 1865 between President Lincoln and Secretary Seward on the one side, and A. H. Stephens, R. M. T. Hunter, and Judge James A. Campbell, representing President Davis, on the other, he instructed his representatives to insist on the recognition of the Confederacy as a condition to any arrangement for the termination of the war. This defeated the object of the conference, and deprived the South of terms which would have been more beneficial than those imposed by the conqueror when the end came a few weeks later. The last days of the Confederate Congress were spent in recriminations between that body and President Davis, and the popularity with which he commenced his administration had almost entirely vanished. In January 1865 the Congress proposed to supersede the president and make General Lee dictator,—a suggestion, however, to which the Confederate commander refused to listen.

After the surrender of the armies of Lee and Johnston in April 1865, President Davis attempted to make his way, through Georgia, across the Mississippi, in the vain hope of continuing the war with the forces of Generals Smith and Magruder. He was taken prisoner on the 10th of May by Federal troops near Irwinville, Irwin county, Georgia, and was brought back to Old Point, Virginia, in order to be confined in prison at Fortress Monroe. In prison he was chained and treated with great severity. He was indicted for treason by a Virginia grand jury, persistent efforts were made to connect him with the assassination of President Lincoln, he was unjustly charged with having deliberately and wilfully caused the sufferings and deaths of Union prisoners at Andersonville and for two years he was denied trial or bail. Such treatment aroused the sympathy of the Southern people, who regarded him as a martyr to their cause, and in a great measure restored him to that place in their esteem which by the close of the war he had lost. It also aroused a general feeling in the North, and when finally he was admitted to bail (in May 1867), Horace Greeley, Gerrit Smith,

and others in that section who had been his political opponents, became his sureties. Charles O'Conor, a leader of the New York bar, volunteered to act as his counsel. With him was associated Robert Ould of Richmond, a lawyer of great ability. They moved to quash the indictment on which he was brought to trial. Chief Justice Chase and Judge John C. Underwood constituted the United States circuit court sitting for Virginia before which the case was brought in December 1868; the court was divided, the chief justice voting to sustain the motion and Underwood to overrule it. The matter was thereupon certified to the Supreme Court of the United States, but as the general amnesty of the 25th of December 1868 included Davis, an order of *nolle prosequi* was entered in February 1869, and Davis and his bondsmen were thereupon released. After his release he visited Europe, and spent the last years of his life in retirement, during which he wrote his *Rise and Fall of the Confederate Government* (2 vols., 1881). In these volumes he attempted to vindicate his administration, and in so doing he attacked the records of those generals he disliked. He also wrote a *Short History of the Confederate States of America* (1890). He died on the 6th of December 1889, at New Orleans, leaving a widow and two daughters—Margaret, who married J. A. Hayes in 1877, and Varina Anne (1864-1898), better known as "Winnie" Davis, the "daughter of the Confederacy," who was the author of several books, including *A Sketch of the Life of Robert Emmet* (1888), a novel, *The Veiled Doctor* (1895), and *A Romance of Summer Seas* (1898). A monument to her, designed by George J. Zolnay, and erected by the Daughters of the Confederacy, was unveiled in Hollywood cemetery, Richmond, Va., on the 9th of November 1899. Mrs Davis, who exerted a marked influence over her husband, survived him many years, passed the last years of her life in New York City, and died there on the 16th of October 1906.

AUTHORITIES.—Several biographies and memoirs of Davis have been published, of which the best are: *Jefferson Davis, Ex-President of the Confederate States* (2 vols., New York, 1890), by his widow; F. H. Alfriend's *Life of Jefferson Davis* (Cincinnati, 1868), which defended him from the charges of incompetence and despotism brought against him; E. A. Pollard's *Life of Jefferson Davis, with a Secret History of the Southern Confederacy* (Philadelphia, 1869), a somewhat partisan arraignment by a prominent Southern journalist; and W. E. Dodd's *Jefferson Davis* (Philadelphia, 1907), which embodies the results of recent historical research. *The Prison Life of Jefferson Davis* (New York, 1866) by John J. Craven (d. 1893), a Federal army surgeon who was Davis's physician at Fortress Monroe, was long popular; it gives a vivid and sympathetic picture of Mr Davis as a prisoner, but its authenticity and accuracy have been questioned.

(W. W. H.*; N. D. M.)

DAVIS (or DAVYS), **JOHN** (1550?-1605), one of the chief English navigators and explorers under Elizabeth, especially in Polar regions, was born at Sandridge near Dartmouth about 1550. From a boy he was a sailor, and early made several voyages with Adrian Gilbert; both the Gilbert and Raleigh families were Devonians of his own neighbourhood, and through life he seems to have profited by their friendship. In January 1583 he appears to have broached his design of a north-west passage to Walsingham and John Dee; various consultations followed; and in 1585 he started on his first north-western expedition. On this he began by striking the ice-bound east shore of Greenland, which he followed south to Cape Farewell; thence he turned north once more and coasted the west Greenland littoral some way, till, finding the sea free from ice, he shaped a "course for China" by the north-west. In 66° N., however, he fell in with Baffin Land, and though he pushed some way up Cumberland Sound, and professed to recognize in this the "hoped strait," he now turned back (end of August). He tried again in 1586 and 1587; in the last voyage he pushed through the straits still named after him into Baffin's Bay, coasting west Greenland to 73° N., almost to Upernavik, and thence making a last effort to find a passage westward along the north of America. Many points in Arctic latitudes (Cumberland Sound, Cape Walsingham, Exeter Sound, &c.) retain names given them by Davis, who ranks with Baffin and Hudson as the greatest of early Arctic explorers and, like Frobisher, narrowly missed the discovery of Hudson's Bay via Hudson's Straits (the "Furious Overfall" of Davis). In 1588 he seems to have commanded the "Black Dog" against the Spanish Armada; in 1589 he joined the earl of Cumberland off the Azores; and in 1591 he accompanied Thomas Cavendish on his last voyage, with the special purpose, as he tells us, of searching "that north-west discovery upon the back parts of America." After the rest of Cavendish's expedition returned unsuccessful, he continued to attempt on his own account the passage of the Strait of Magellan; though defeated here by foul weather, he discovered the Falkland Islands. The passage home was extremely disastrous, and he brought back only fourteen of his seventy-six men. After his return in 1593 he published a valuable treatise on practical navigation in *The Seaman's Secrets* (1594), and a more theoretical work in *The World's Hydrographical Description* (1595). His invention of back-staff and double quadrant (called a "Davis Quadrant" after him) held the field among English seamen till long after Hadley's reflecting quadrant had been introduced. In 1596-1597 Davis seems to have sailed with Raleigh (as master of Sir Walter's own ship) to Cadiz and the Azores; and in 1598-1600 he accompanied a Dutch expedition to the East Indies as pilot, sailing from Flushing, returning to Middleburg, and narrowly escaping destruction from treachery at Achin in Sumatra. In 1601-1603 he accompanied Sir James Lancaster as first pilot on his voyage in the service of the East India Company; and in December 1604 he sailed again for the same destination as pilot to Sir Edward Michelborne (or Michelbourn). On this journey he was killed by Japanese pirates off Bintang near Sumatra.

A Traverse Book made by John Davis in 1587, an *Account of his Second Voyage in 1586*, and a *Report of Master John Davis of his three voyages made for the Discovery of the North West Passage* were printed in Hakluyt's collection. Davis himself published *The Seaman's Secrets, divided into two Parts* (London, 1594), *The World's Hydrographical Description ... whereby appears that there is a short and speedy Passage into the South Seas, to China, Molucca, Philippina, and India, by Northerly Navigation* (London, 1595). Various references to Davis are in the *Calendars of State Papers, Domestic* (1591-1594), and *East Indies* (1513-1616). See also *Voyages and Works of John Davis*, edited by A. H. Markham (London, Hakluyt Society, 1880), and the article "John Davys" by Sir J. K. Laughton in the *Dictionary of National Biography*.

(C. R. B.)

DAVIS, THOMAS OSBORNE (1814-1845), Irish poet and journalist, was born at Mallow, Co. Cork, on the 14th of October 1814. His father, James Thomas Davis, a surgeon in the royal artillery, who died in the month of his son's birth, belonged to an English family of Welsh extraction, and his mother, Mary Atkins, belonged to a Protestant Anglo-Irish family. Davis graduated B.A. at Trinity College, Dublin, in 1836, and was called to the bar two years later. Brought up in an English and Tory circle, he was led to adopt nationalist views by the study of Irish history, a complicated subject in which text-books and the ordinary guides to knowledge were then lacking. In 1840 he made a speech appealing to Irish sentiment before the college historical society, which had been reorganized in 1839. With a view to indoctrinating the Irish people with the idea of nationality he joined John Blake Dillon in editing the *Dublin Morning Register*. The proprietor very soon dismissed him, and Davis saw that his propaganda would be ineffective if he continued to stand outside the national organization. He therefore announced himself a follower of Daniel O'Connell, and became an energetic worker (1841) on the committee of the repeal association. He helped Dillon and Charles Gavan Duffy to found the weekly newspaper, *The Nation*, the first number of which appeared on the 15th of October 1842. The paper was chiefly written by these three promoters, and its concentrated purpose and vigorous writing soon attracted attention. Davis, who had never written verse, was induced to attempt it for the new undertaking. The "Lament of Owen Roe O'Neill" was printed in the sixth number, and was followed by a series of lyrics that take a high place in Irish national poetry—"The Battle of Fontenoy," "The Geraldines," "Máire Bhán a Stoír" and many others. Davis contemplated a history of Ireland, an edition of the speeches of Irish orators, one volume of which appeared, and a life of Wolfe Tone. These projects remained incomplete, but Davis's determination and continuous zeal made their mark on his party. Differences arose between O'Connell and the young writers of *The Nation*, and as time went on became more pronounced. Davis was accused of being anti-Catholic, and was systematically attacked by O'Connell's followers. But he differed, said Sir Charles Gavan Duffy, from earlier and later Irish tribunes, "by a perfectly genuine desire to remain unknown, and reap neither recognition nor reward for his work." His early death from scarlet fever (September 15th, 1845) deprived "Young Ireland" of its most striking personality.

His *Poems* and his *Literary and Historical Essays* were collected in 1846. There is an edition of his prose writings (1889) in the *Camelot Classics*. See the monograph on *Thomas Davis* by Sir Charles Gavan Duffy (1890, abridged ed. 1896), and the same writer's *Young Ireland* (revised edition, 1896).

DAVISON, WILLIAM (*c.* 1541-1608), secretary to Queen Elizabeth, was of Scottish descent, and in 1566 acted as secretary to Henry Killigrew (d. 1603), when he was sent into Scotland by Elizabeth on a mission to Mary, queen of Scots. Remaining in that country for about ten years, Davison then went twice to the Netherlands on diplomatic business, returning to England in 1586 to defend the hasty conduct of his friend, Robert Dudley, earl of Leicester. In the same year he became member of parliament for Knaresborough, a privy councillor, and assistant to Elizabeth's secretary, Thomas Walsingham; but he soon appears to have acted rather as the colleague than the subordinate of Walsingham. He was a member of the commission appointed to try Mary, queen of Scots, although he took no part in its proceedings. When sentence was passed upon Mary the warrant for her execution was entrusted to Davison, who, after some delay, obtained the queen's signature. On this occasion, and also in subsequent interviews with her secretary, Elizabeth suggested that Mary should be executed in some more secret fashion, and her conversation afforded ample proof that she disliked to take upon herself any responsibility for the death of her rival. Meanwhile, the privy council having been summoned by Lord Burghley, it was decided to carry out the sentence at once, and Mary was beheaded on the 8th of February 1587. When the news of the execution reached Elizabeth she was extremely indignant, and her wrath was chiefly directed against Davison, who, she asserted, had disobeyed her instructions not to part with the warrant. The secretary was arrested and thrown into prison, but, although he defended himself vigorously, he did not say anything about the queen's wish to get rid of Mary by assassination. Charged before the Star Chamber with misprision and contempt, he was acquitted of evil intention, but was sentenced to pay a fine of 10,000 marks, and to imprisonment during the queen's pleasure; but owing to the exertions of several influential men he was released in 1589. The queen, however, refused to employ him again in her service, and he retired to Stepney, where he died in December 1608. Davison appears to have been an industrious and outspoken man, and was undoubtedly made the scapegoat for the queen's pusillanimous conduct. By his wife, Catherine Spelman, he had a family of four sons and two daughters. Two of his sons, Francis and Walter, obtained some celebrity as poets.

Many state papers written by him, and many of his letters, are extant in various collections of manuscripts. See Sir N. H. Nicolas, *Life of W. Davison* (London, 1823); J. A. Froude, *History of England* (London, 1881 fol.); *Calendar of State Papers 1580-1609*; and *Correspondence of Leicester during his Government of the Low Countries*, edited by J. Bruce (London, 1844).

DAVIS STRAIT, the broad strait which separates Greenland from North America, and connects Baffin Bay with the open Atlantic. At its narrowest point, which occurs just where the Arctic Circle crosses it, it is nearly 200 m. wide. This part is also the shallowest, a sounding of 112 fathoms being found in the centre, whereas

the depth increases rapidly both to north and to south. Along the western shore (Baffin Land) a cold current passes southward; but along the east there is a warm northward stream, and there are a few Danish settlements on the Greenland coast. The strait takes its name from the explorer John Davis.

DAVITT, MICHAEL (1846-1906), Irish Nationalist politician, son of a peasant farmer in Co. Mayo, was born on the 25th of March 1846. His father was evicted for non-payment of rent in 1851, and migrated to Lancashire, where at the age of ten the boy began work in a cotton mill at Haslingden. In 1857 he lost his right arm by a machinery accident, and he had to get employment as a newsboy and printer's "devil." He drifted into the ranks of the Fenian brotherhood in 1865, and in 1870 he was arrested for treason-felony in arranging for sending fire-arms into Ireland, and was sentenced to fifteen years' penal servitude. After seven years he was released on ticket of leave. He at once rejoined the "Irish Republican Brotherhood," and went to the United States, where his mother, herself of American birth, had settled with the rest of the family, in order to concert plans with the Fenian leaders there. Returning to Ireland he helped C. S. Parnell to start the Land League in 1879, and his violent speeches resulted in his re-arrest and consignment to Portland by Sir William Harcourt, then home secretary. He was released in 1882, but was again prosecuted for seditious speeches in 1883, and suffered three months' imprisonment. He had been elected to parliament for Meath as a Nationalist in 1882, but being a convict was disqualified to sit. He was included as one of the respondents before the Parnell Commission (1888-1890) and spoke for five days in his own defence, but his prominent association with the revolutionary Irish schemes was fully established. (See PARNELL.) He took the anti-Parnellite side in 1890, and in 1892 was elected to parliament for North Meath, but was unseated on petition. He was then returned for North-East Cork, but had to vacate his seat through bankruptcy, caused by the costs in the North Meath petition. In 1895 he was elected for West Mayo, but retired before the dissolution in 1900. He died on the 31st of May 1906, in Dublin. A sincere but embittered Nationalist, anti-English to the backbone, anti-clerical, and sceptical as to the value of the purely parliamentary agitation for Home Rule, Davitt was a notable representative of the survival of the Irish "physical force" party, and a strong link with the extremists in America. In later years his Socialistic Radicalism connected him closely with the Labour party. He wrote constantly in American and colonial journals, and published some books, always with the strongest bias against English methods; but his force of character earned him at least the respect of those who could make calm allowance for an open enemy of the established order, and a higher meed of admiration from those who sympathized with his objects or were not in a position to be threatened by them.

DAVOS (Romonsch *Tavau*, a name variously explained as meaning a sheep pasture or simply "behind"), a mountain valley in the Swiss canton of the Grisons, lying east of Coire (whence it is 40 m. distant by rail), and north-west of the Lower Engadine (accessible at Süs in 18 m. by road). It contains two main villages, 2 m. from each other, Dörfli and Platz (the chief hamlet), which are 5015 ft. above the sea-level, and had a population in 1900 of 8089, a figure exceeded in the Grisons only by the capital Coire. Of the population 5391 were Protestants, 2564 Romanists, and 81 Jews; while 6048 were German-speaking and 486 Romonsch-speaking. In 1860 the population was only 1705, rising to 2002 in 1870, to 2865 in 1880, to 3891 in 1888, and to 8089 in 1890. This steady increase is due to the fact that the valley is now much frequented in winter by consumptive patients, as its position, sheltered from cold winds and exposed to brilliant sunshine in the daytime, has a most beneficial effect on invalids in the first stages of that terrible disease. A local doctor, by name Spengler, first noticed this fact about 1865, and the valley soon became famous. It is now provided with excellent hotels, sanatoria, &c., but as lately as 1860 there was only one inn there, housed in the 16th-century *Rathhaus* (town hall), which is still adorned by the heads of wolves shot in the neighbourhood. At the north end of the valley is the fine lake of Davos, used for skating in the winter, while from Platz the splendidly engineered *Landwasserstrasse* leads (20 m.) down to the Alvaneubad station on the Albula railway from Coire to the Engadine.

We first hear of Tavaus or Tavauns in 1160 and 1213, as a mountain pasture or "alp." It was then in the hands of a Romonsch-speaking population, as is shown by many surviving field names. But, some time between 1260 and 1282, a colony of German-speaking persons from the Upper Valais (first mentioned in 1289) was planted there by its lord, Walter von Vaz, so that it has long been a Teutonic island in the midst of a Romonsch-speaking population. Historically it is associated with the Prättigau or Landquart valley to the north, as it was the most important village of the region, and in 1436 became the capital of the League of the Ten Jurisdictions. (See GRISONS.) It formerly contained many iron mines, and belonged from 1477 to 1649 to the Austrian Habsburgs. In 1779 Davos was visited and described by Archdeacon W. Coxe.

(W. A. B. C.)

DAVOUT, LOUIS NICOLAS, duke of Auerstädt and prince of Eckmühl (1770-1823), marshal of France, was born at Annoux (Yonne) on the 10th of May 1770. His name is also, less correctly, spelt Davoût and Davoust. He entered the French army as a sub-lieutenant in 1788, and on the outbreak of the Revolution he embraced its principles. He was *chef de bataillon* in a volunteer corps in the campaign of 1792, and

distinguished himself at Neerwinden in the following spring. He had just been promoted general of brigade when he was removed from the active list as being of noble birth. He served, however, in the campaigns of 1794-1797 on the Rhine, and accompanied Desaix in the Egyptian expedition of Bonaparte. On his return he took part in the campaign of Marengo under Napoleon, who placed the greatest confidence in his abilities, made him a general of division soon after Marengo, and in 1801 gave him a command in the consular guard. At the accession of Napoleon as emperor, Davout was one of the generals who were created marshals of France. As commander of the III. corps of the *Grande Armée* Davout rendered the greatest services. At Austerlitz, after a forced march of forty-eight hours, the III. corps bore the brunt of the allies' attack. In the Jena campaign Davout with a single corps fought and won the brilliant victory of Auerstädt against the main Prussian army. (See Napoleonic Campaigns.) He took part, and added to his renown, in the campaign of Eylau and Friedland. Napoleon left him as governor-general in the grand-duchy of Warsaw when the treaty of Tilsit put an end to the war (1807), and in 1808 created him duke of Auerstädt. In the war of 1809 Davout took a brilliant part in the actions which culminated in the victory of Eckmühl, and had an important share in the battle of Wagram (*q.v.*). He was created prince of Eckmühl about this time. It was Davout who was entrusted by Napoleon with the task of organizing the "corps of observation of the Elbe," which was in reality the gigantic army with which the emperor invaded Russia in 1812. In this Davout commanded the I. corps, over 70,000 strong, and defeated the Russians at Mohilev before he joined the main army, with which he continued throughout the campaign and the retreat from Moscow. In 1813 he commanded the Hamburg military district, and defended Hamburg, a city ill fortified and provisioned, and full of disaffection, through a long siege, only surrendering the place on the direct order of Louis XVIII. after the fall of Napoleon in 1814.

Davout's military character was on this, as on many other occasions, interpreted as cruel and rapacious, and he had to defend himself against many attacks upon his conduct at Hamburg. He was a stern disciplinarian, almost the only one of the marshals who exacted rigid and precise obedience from his troops, and consequently his corps was more trustworthy and exact in the performance of its duty than any other. Thus, in the earlier days of the *Grande Armée*, it was always the III. corps which was entrusted with the most difficult part of the work in hand. The same criterion is to be applied to his conduct of civil affairs. His rapacity was in reality Napoleon's, for he gave the same undeviating obedience to superior orders which he enforced in his own subordinates. As for his military talents, he was admitted by his contemporaries and by later judgment to be one of the ablest, perhaps the ablest, of all Napoleon's marshals. On the first restoration he retired into private life, openly displaying his hostility to the Bourbons, and when Napoleon returned from Elba; Davout at once joined him. Appointed minister of war, he reorganized the French army as far as the limited time available permitted, and he was so far indispensable to the war department that Napoleon kept him at Paris during the Waterloo campaign. To what degree his skill and bravery would have altered the fortunes of the campaign of 1815 can only be surmised, but it has been made a ground of criticism against Napoleon that he did not avail himself in the field of the services of the best general he then possessed. Davout directed the gallant, but hopeless, defence of Paris after Waterloo, and was deprived of his marshalate and his titles at the second restoration. When some of his subordinate generals were proscribed, he demanded to be held responsible for their acts, as executed under his orders, and he endeavoured to prevent the condemnation of Ney. After a time the hostility of the Bourbons towards Davout died away, and he was reconciled to the monarchy. In 1817 his rank and titles were restored, and in 1819 he became a member of the chamber of peers. He died at Paris on the 1st of June 1823.

See the marquise de Blocqueville, *Le Maréchal Davout raconté par les siens et lui-même* (Paris, 1870-1880, 1887); Chenier, *Davout, duc d'Auerstädt* (Paris, 1866).

DAVY, SIR HUMPHRY, Bart. (1778-1829), English chemist, was born on the 17th of December 1778 at or near Penzance in Cornwall. During his school days at the grammar schools of Penzance and Truro he showed few signs of a taste for scientific pursuits or indeed of any special zeal for knowledge or of ability beyond a certain skill in making verse translations from the classics and in story-telling. But when in 1794 his father, Robert Davy, died, leaving a widow and five children in embarrassed circumstances, he awoke to his responsibilities as the eldest son, and becoming apprentice to a surgeon-apothecary at Penzance set to work on a systematic and remarkably wide course of self-instruction which he mapped out for himself in preparation for a career in medicine. Beginning with metaphysics and ethics and passing on to mathematics, he turned to chemistry at the end of 1797, and within a few months of reading Nicholson's and Lavoisier's treatises on that science had produced a new theory of light and heat. About the same time he made the acquaintance of two men of scientific attainments—Gregory Watt (1777-1804), a son of James Watt, and Davies Giddy, afterwards Gilbert (1767-1839), who was president of the Royal Society from 1827 to 1831. By the latter he was recommended to Dr Thomas Beddoes, who was in 1798 establishing his Medical Pneumatic Institution at Bristol for investigating the medicinal properties of various gases. Here Davy, released from his indentures, was installed as superintendent towards the end of 1798. Early next year two papers from his pen were published in Beddoes' *West Country Contributions*—one "On Heat, Light and the Combinations of Light, with a new Theory of Respiration and Observations on the Chemistry of Life," and the other "On the Generation of Phosoxygen (Oxygen gas) and the Causes of the Colours of Organic Beings." These contain an account of the well-known experiment in which he sought to establish the immateriality of heat by showing its generation through the friction of two pieces of ice in an exhausted vessel, and further attempt to prove that light is "matter of a peculiar kind," and that oxygen gas, being a compound of this matter with a simple substance, would more properly be termed phosoxygen. Founded on faulty experiments and reasoning, the views he expressed were either ignored or ridiculed; and it was long before he bitterly regretted the temerity with which he had published his hasty generalizations.

One of his first discoveries at the Pneumatic Institution on the 9th of April 1799 was that pure nitrous oxide (laughing gas) is perfectly respirable, and he narrates that on the next day he became "absolutely

intoxicated” through breathing sixteen quarts of it for “near seven minutes.” This discovery brought both him and the Pneumatic Institution into prominence. The gas itself was inhaled by Southey and Coleridge among other distinguished people, and promised to become fashionable, while further research yielded Davy material for his *Researches, Chemical and Philosophical, chiefly concerning Nitrous Oxide*, published in 1800, which secured his reputation as a chemist. Soon afterwards, Count Rumford, requiring a lecturer on chemistry for the recently established Royal Institution in London, opened negotiations with him, and on the 16th of February 1801 he was engaged as assistant lecturer in chemistry and director of the laboratory. Ten weeks later, having “given satisfactory proofs of his talents” in a course of lectures on galvanism, he was appointed lecturer, and his promotion to be professor followed on the 31st of May 1802. One of the first tasks imposed on him by the managers was the delivery of a course of lectures on the chemical principles of tanning, and he was given leave of absence for July, August and September 1801 in order to acquaint himself practically with the subject. The main facts he discovered from his experiments in this connexion were described before the Royal Society in 1803. In 1802 the board of agriculture requested him to direct his attention to agricultural subjects; and in 1803, with the acquiescence of the Royal Institution, he gave his first course of lectures on agricultural chemistry and continued them for ten successive years, ultimately publishing their substance as *Elements of Agricultural Chemistry* in 1813. But his chief interest at the Royal Institution was with electro-chemistry. Galvanic phenomena had already engaged his attention before he left Bristol, but in London he had at his disposal a large battery which gave him much greater opportunities. His first communication to the Royal Society, read in June 1801, related to galvanic combinations formed with single metallic plates and fluids, and showed that an electric cell might be constructed with a single metal and two fluids, provided one of the fluids was capable of oxidizing one surface of the metal; previous piles had consisted of two different metals, or of one plate of metal and the other of charcoal, with an interposed fluid. Five years later he delivered before the Royal Society his first Bakerian lecture, “On some Chemical Agencies of Electricity,” which J. J. Berzelius described as one of the most remarkable memoirs in the history of chemical theory. He summed up his results in the general statement that “hydrogen, the alkaline substances, the metals and certain metallic oxides are attracted by negatively electrified metallic surfaces, and repelled by positively electrified metallic surfaces; and contrariwise, that oxygen and acid substances are attracted by positively electrified metallic surfaces and repelled by negatively electrified metallic surfaces; and these attractive and repulsive forces are sufficiently energetic to destroy or suspend the usual operation of elective affinity.” He also sketched a theory of chemical affinity on the facts he had discovered, and concluded by suggesting that the electric decomposition of neutral salts might in some cases admit of economical applications and lead to the isolation of the true elements of bodies. A year after this paper, which gained him from the French Institute the medal offered by Napoleon for the best experiment made each year on galvanism, he described in his second Bakerian lecture the electrolytic preparation of potassium and sodium, effected in October 1807 by the aid of his battery. According to his cousin, Edmund Davy,[1] then his laboratory assistant, he was so delighted with this achievement that he danced about the room in ecstasy. Four days after reading his lecture his health broke down, and severe illness kept him from his professional duties until March 1808. As soon as he was able to work again he attempted to obtain the metals of the alkaline earths by the same methods as he had used for those of the fixed alkalis, but they eluded his efforts and he only succeeded in preparing them as amalgams with mercury, by a process due to Berzelius. His attempts to decompose “alumine, silica, zircone and glucine” were still less fortunate. At the end of 1808 he read his third Bakerian lecture, one of the longest of his papers but not one of the best. In it he disproved the idea advanced by Gay Lussac that potassium was a compound of hydrogen, not an element; but on the other hand he cast doubts on the elementary character of phosphorus, sulphur and carbon, though on this point he afterwards corrected himself. He also described the preparation of boron, for which at first he proposed the name boracium, on the impression that it was a metal. About this time a voluntary subscription among the members of the Royal Institution put him in possession of a new galvanic battery of 2000 double plates, with a surface equal to 128,000 sq. in., to replace the old one, which had become unserviceable. His fourth Bakerian lecture, in November 1809, gave further proofs of the elementary nature of potassium, and described the properties of telluretted hydrogen. Next year, in a paper read in July and in his fifth Bakerian lecture in November, he argued that oxymuriatic acid, contrary to his previous belief, was a simple body, and proposed for it the name “chlorine.”

Davy’s reputation was now at its zenith. As a lecturer he could command an audience of little less than 1000 in the theatre of the Royal Institution, and his fame had spread far outside London. In 1810, at the invitation of the Dublin Society, he gave a course of lectures on electro-chemical science, and in the following year he again lectured in Dublin, on chemistry and geology, receiving large fees at both visits. During his second visit Trinity College conferred upon him the honorary degree of LL.D., the only university distinction he ever received. On the 8th of April 1812 he was knighted by the prince regent; on the 9th he gave his farewell lecture as professor of chemistry at the Royal Institution; and on the 11th he was married to Mrs Apreece, daughter and heiress of Charles Kerr of Kelso, and a distant connexion of Sir Walter Scott. A few months after his marriage he published the first and only volume of his *Elements of Chemical Philosophy*, with a dedication to his wife, and was also re-elected professor of chemistry at the Royal Institution, though he would not pledge himself to deliver lectures, explaining that he wished to be free from the routine of lecturing in order to have more time for original work. Towards the end of the year he began to investigate chloride of nitrogen, which had just been discovered by P. L. Dulong, but was obliged to suspend his inquiries during the winter on account of injury to his eye caused by an explosion of that substance. In the spring of 1813 he was engaged on the chemistry of fluorine, and though he failed to isolate the element, he reached accurate conclusions regarding its nature and properties. In October he started with his wife for a continental tour, and with them, as “assistant in experiments and writing,” went Michael Faraday, who in the previous March had been engaged as assistant in the Royal Institution laboratory. Having obtained permission from the French emperor to travel in France, he went first to Paris, where during his two months’ stay every honour was accorded him, including election as a corresponding member of the first class of the Institute. He does not, however, seem to have reciprocated the courtesy of his French hosts, but gave offence by the brusqueness of his manner, though his supercilious bearing, according to his biographer, Dr Paris, was to be ascribed less to any conscious superiority than to an “ungraceful timidity which he could never conquer.” Nor was his action in regard to iodine calculated to conciliate. That substance, recently discovered

in Paris, was attracting the attention of French chemists when he stepped in and, after a short examination with his portable chemical laboratory, detected its resemblance to chlorine and pronounced it an "undecompounded body." Towards the end of December he left for Italy. At Genoa he investigated the electricity of the torpedo-fish, and at Florence, by the aid of the great burning-glass in the Accademia del Cimento, he effected the combustion of the diamond in oxygen and decided that, beyond containing a little hydrogen, it consisted of pure carbon. Then he went to Rome and Naples and visited Vesuvius and Pompeii, called on Volta at Milan, spent the summer in Geneva, and returning to Rome occupied the winter with an inquiry into the composition of ancient colours.

A few months after his return, through Germany, to London in 1815, he was induced to take up the question of constructing a miner's safety lamp. Experiments with samples of fire-damp sent from Newcastle soon taught him that "explosive mixtures of mine-damp will not pass through small apertures or tubes"; and in a paper read before the Royal Society on the 9th of November he showed that metallic tubes, being better conductors of heat, were superior to glass ones, and explained that the heat lost by contact with a large cooling surface brought the temperature of the first portions of gas exploded below that required for the firing of the other portions. Two further papers read in January 1816 explained the employment of wire gauze instead of narrow tubes, and later in the year the safety lamps were brought into use in the mines. A large collection of the different models made by Davy in the course of his inquiries is in the possession of the Royal Institution. He took out no patent for his invention, and in recognition of his disinterestedness the Newcastle coal-owners in September 1817 presented him with a dinner-service of silver plate.[2]

In 1818, when he was created a baronet, he was commissioned by the British government to examine the papyri of Herculaneum in the Neapolitan museum, and he did not arrive back in England till June 1820. In November of that year the Royal Society, of which he had become a fellow in 1803, and acted as secretary from 1807 to 1812, chose him as their president, but his personal qualities were not such as to make him very successful in that office, especially in comparison with the tact and firmness of his predecessor, Sir Joseph Banks. In 1821 he was busy with electrical experiments and in 1822 with investigations of the fluids contained in the cavities of crystals in rocks. In 1823, when Faraday liquefied chlorine, he read a paper which suggested the application of liquids formed by the condensation of gases as mechanical agents. In the same year the admiralty consulted the Royal Society as to a means of preserving the copper sheathing of ships from corrosion and keeping it smooth, and he suggested that the copper would be preserved if it were rendered negatively electrical, as would be done by fixing "protectors" of zinc to the sheeting. This method was tried on several ships, but it was found that the bottoms became extremely foul from accumulations of seaweed and shellfish. For this reason the admiralty decided against the plan, much to the inventor's annoyance, especially as orders to remove the protectors already fitted were issued in June 1825, immediately after he had announced to the Royal Society the full success of his remedy.

In 1826 Davy's health, which showed signs of failure in 1823, had so declined that he could with difficulty indulge in his favourite sports of fishing and shooting, and early in 1827, after a slight attack of paralysis, he was ordered abroad. After a short stay at Ravenna he removed to Salzburg, whence, his illness continuing, he sent in his resignation as president of the Royal Society. In the autumn he returned to England and spent his time in writing his *Salmonia or Days of Flyfishing*, an imitation of *The Compleat Angler*. In the spring of 1828 he again left England for Illyria, and in the winter fixed his residence at Rome, whence he sent to the Royal Society his "Remarks on the Electricity of the Torpedo," written at Trieste in October. This, with the exception of a posthumous work, *Consolations in Travel, or the Last Days of a Philosopher* (1830), was the final production of his pen. On the 20th of February 1829 he suffered a second attack of paralysis which rendered his right side quite powerless, but under the care of his brother, Dr John Davy (1791-1868), he rallied sufficiently to be removed to Geneva, where he died on the 29th of May.

Of a sanguine, somewhat irritable temperament, Davy displayed characteristic enthusiasm and energy in all his pursuits. As is shown by his verses and sometimes by his prose, his mind was highly imaginative; the poet Coleridge declared that if he "had not been the first chemist, he would have been the first poet of his age," and Southey said that "he had all the elements of a poet; he only wanted the art." In spite of his ungainly exterior and peculiar manner, his happy gifts of exposition and illustration won him extraordinary popularity as a lecturer, his experiments were ingenious and rapidly performed, and Coleridge went to hear him "to increase his stock of metaphors." The dominating ambition of his life was to achieve fame, but though that sometimes betrayed him into petty jealousy, it did not leave him insensible to the claims on his knowledge of the "cause of humanity," to use a phrase often employed by him in connexion with his invention of the miners' lamp. Of the smaller observances of etiquette he was careless, and his frankness of disposition sometimes exposed him to annoyances which he might have avoided by the exercise of ordinary tact.

See Dr J. A. Paris, *The Life of Sir Humphry Davy* (1831), vol. ii. of which on pp. 450-456 gives a list of his publications. Dr John Davy, *Memoirs of Sir Humphry Davy* (1836); Collected Works (with shorter memoir, 1839); *Fragmentary Remains, Literary and Scientific* (1858). T. E. Thorpe, *Humphry Davy, Poet and Philosopher* (1896).

1 Edmund Davy (1785-1857) became professor of chemistry at Cork Institution in 1813, and at the Royal Dublin Society in 1826. His son, Edmund William Davy (born in 1826), was appointed professor of medicine in the Royal College, Dublin, in 1870.

2 Davy's will directed that this service, after Lady Davy's death, should pass to his brother, Dr John Davy, on whose decease, if he had no heirs who could make use of it, it was to be melted and sold, the proceeds going to the Royal Society "to found a medal to be given annually for the most important discovery in chemistry anywhere made in Europe or Anglo-America." The silver produced £736, and the interest on that sum is expended on the Davy medal, which was awarded for the first time in 1877, to Bunsen and Kirchhoff for their discovery of spectrum analysis.

DAWARI, or Dauri, a Pathan tribe on the Waziri border of the North-West Frontier Province of India. The Dawaris inhabit the Tochi Valley (*q.v.*), otherwise known as Dawar or Daur, and are a homogeneous tribe of considerable size, numbering 5200 fighting men. Though surrounded on all four sides by a Waziri population they bear little resemblance to Waziris. They are an agricultural and the Waziris a pastoral race, and they are much richer than their neighbours. They thrive on a rich sedimentary soil copiously irrigated in the midst of a country where cultivable land of any kind is scarce and water in general hardly to be obtained. But they pay a heavy tax in health and well-being for the possession of their fertile acres. Fevers and other ravaging diseases are bred in the wet sodden lands of the Tochi Valley, lying at the bottom of a deep depression exposed to the burning rays of the sun; and the effects of these ailments may be clearly traced in the drawn or bloated features and the shrunken or swollen limbs of nearly every Dawari that has passed middle life. They have an evil name for indolence, drug-eating and unnatural vices, and are morally the lowest of the Afghan races; but in spite of these defects, and of the contempt with which they are regarded by the other Afghan tribes, they have held their own for centuries against the warlike and hardy Waziris. The secret of this is that the Dawaris stand together, and the Waziris do not, while the weaker race is gifted with infinite patience and tenacity of purpose. With the advent of British government, however, the Dawaris are now secured in the possession of their ancestral lands.

See J. G. Lorimer, *Grammar and Vocabulary of Waziri Pushtu* (1902).

DAWES, HENRY LAURENS (1816-1903), American lawyer, was born at Cummington, Massachusetts, on the 30th of October 1816. After graduating at Yale in 1839, he taught for a time at Greenfield, Mass., and also edited *The Greenfield Gazette*. In 1842 he was admitted to the bar and began the practice of law at North Adams, where for a time he conducted *The Transcript*. He served in the Massachusetts House of Representatives in 1848-1849 and in 1852, in the state Senate in 1850, and in the Massachusetts constitutional convention in 1853. From 1853 to 1857 he was United States district attorney for the western district of Massachusetts; and from 1857-1875 he was a Republican member of the national House of Representatives. In 1875 he succeeded Charles Sumner as senator from Massachusetts, serving until 1893. During this long period of legislative activity he served in the House on the committees on elections, ways and means, and appropriations, took a prominent part in the anti-slavery and reconstruction measures during and after the Civil War, in tariff legislation, and in the establishment of a fish commission and the inauguration of daily weather reports. In the Senate he was chairman of the committee on Indian affairs, and gave much attention to the enactment of laws for the benefit of the Indians. On leaving the Senate, in 1893, he became chairman of the Commission to the Five Civilized Tribes (sometimes called the Dawes Indian Commission), and served in this capacity for ten years, negotiating with the tribes for the extinction of the communal title to their land and for the dissolution of the tribal governments, with the object of making the tribes a constituent part of the United States.[1] Dawes died at Pittsfield, Mass., on the 5th of February 1903.

1 The commission completed its labours on the 1st of July 1905, after having allotted 20,000,000 acres of land among 90,000 Indians and absorbed the five Indian governments into the national system. The “five tribes” were the Cherokee, Chickasaw, Choctaw, Creek and Seminole Indians.

DAWES, RICHARD (1708-1766), English classical scholar, was born in or near Market Bosworth. He was educated at the town grammar school under Anthony Blackwall, and at Emmanuel College, Cambridge, of which society he was elected fellow in 1731. His peculiar habits and outspoken language made him unpopular. His health broke down in consequence of his sedentary life, and it is said that he took to bell-ringing at Great St Mary’s as a restorative. He was a bitter enemy of Bentley, who he declared knew nothing of Greek except from indexes. In 1738 Dawes was appointed to the mastership of the grammar school, Newcastle-on-Tyne, combined with that of St Mary’s hospital. From all accounts his mind appears to have become unhinged; his eccentricities of conduct and continual disputes with his governing body ruined the school, and finally, in 1749, he resigned his post and retired to Heworth, where he chiefly amused himself with boating. He died on the 21st of March 1766. Dawes was not a prolific writer. The book on which his fame rests is his *Miscellanea critica* (1745), which gained the commendation of such distinguished continental scholars as L. C. Valckenaer and J. J. Reiske. The *Miscellanea*, which was re-edited by T. Burgess (1781), G. C. Harles (1800) and T. Kidd (1817), for many years enjoyed a high reputation, and although some of the “canons” have been proved untenable and few can be accepted universally, it will always remain an honourable and enduring monument of English scholarship.

See J. Hodgson, *An Account of the Life and Writings of Richard Dawes* (1828); H. R. Luard in *Dict. of Nat. Biog.*; J. E. Sandys, *Hist. of Classical Scholarship*, ii. 415.

DAWISON, BOGUMIL (1818-1872), German actor, was born at Warsaw, of Jewish parents, and at the age of nineteen went on the stage. In 1839 he received an appointment to the theatre at Lemberg in Galicia. In

1847 he played at Hamburg with marked success, was from 1849 to 1854 a member of the Burg theatre in Vienna, and then became connected with the Dresden court theatre. In 1864 he was given a life engagement, but resigned his appointment, and after starring through Germany visited the United States in 1866. He died in Dresden on the 1st of February 1872. Dawison was considered in Germany an actor of a new type; a leading critic wrote that he and Marie Seebach “swept like fresh gales over dusty tradition, and brushing aside the monotony of declamation gave to their rôles more character and vivacity than had hitherto been known on the German stage.” His chief parts were Mephistopheles, Franz Moor, Mark Antony, Hamlet, Charles V., Richard III. and King Lear.

DAWKINS, WILLIAM BOYD (1838-), English geologist and archaeologist, was born at Buttington vicarage near Welshpool, Montgomeryshire, on the 26th of December 1838. Educated at Rossall School and Oxford, he joined the Geological Survey in 1862, and in 1869 became curator of the Manchester museum, a post which he retained till 1890. He was appointed professor of geology and palaeontology in Owens College, Manchester, in 1874. He paid special attention to the question of the existence of coal in Kent, and in 1882 was selected by the Channel tunnel committee to make a special survey of the French and English coasts. He was also employed in the scheme of a tunnel beneath the Humber. His chief distinctions, however, were won in the realms of anthropology by his researches into the lives of the cave-dwellers of prehistoric times, labours which have borne fruit in his books *Cave-hunting* (1874); *Early Man in Britain* (1880); *British Pleistocene Mammalia* (1866-1887). He became a Fellow of the Royal Society in 1867, and acted as president of the anthropological section of the British Association in 1882 and of the geological section in 1888.

DAWLISH, a watering-place in the Ashburton parliamentary division of Devonshire, England, on the English Channel, near the outflow of the Exe, 12 m. S. of Exeter by the Great Western railway. Pop. of urban district (1901) 4003. It lies on a cove sheltered by two projecting headlands. A small stream which flows through the town is lined on both sides by pleasure-grounds. Dawlish owes its prosperity to the visitors attracted, in spring and early summer, by the warm climate and excellent bathing. An annual pleasure fair is held on Easter Monday, and a regatta in August or September. Until its sale in the 19th century, the site of Dawlish belonged to Exeter cathedral, having been given to the chapter by Leofric, bishop of Exeter, in 1050.

DAWN (the 16th-century form of the earlier “dawing” or “dawning,” from an old verb “daw,” O. Eng. *dagian*, to become day; *cf.* Dutch *dagen*, and Ger. *tagen*), the time when light appears (daws) in the sky in the morning. The dawn colours appear in the reverse order of the sunset colours and are due to the same cause. When the sun is lowest in both cases the colour is deep red; this gradually changes through orange to gold and brilliant yellow as the sun approaches the horizon. These colours follow each other in order of refrangibility, reproducing all the colours of the spectrum in order except the blue rays which are scattered in the sky. The colours of the dawn are purer and colder than the sunset colours since there is less dust and moisture in the atmosphere and less consequent sifting of light rays.

DAWSON, GEORGE (1821-1876), English nonconformist divine, was born in London on the 24th of February 1821, and was educated at Marischal College, Aberdeen, and at the university of Glasgow. In 1843 he accepted the pastorate of the Baptist church at Rickmansworth, and in 1844 a similar charge at Mount Zion, Birmingham, where he attracted large congregations by his eloquence and his unconventional views. Desiring freedom from any definite creed, he left the Baptist church and became minister of the “Church of the Saviour,” a building erected for him by his supporters. Here he exercised a stimulating and varied ministry for nearly thirty years, gathering round him a congregation of all types and especially of such as found the dogmas of the age distasteful. He had much sympathy with the Unitarian position, but was not himself a Unitarian. Indeed he had no fixed standpoint, and discussed truths and principles from various aspects. His sermons, though not particularly speculative, were unconventional and quickening. He was the friend of Carlyle and Emerson, and did much to popularize their teachings, his influence being conspicuous, especially in his demand for a high ethical standard in everyday life and his insistence on the Christianization of citizenship. He was warmly supported by Dr R. W. Dale, and by J. T. Bunce, editor of *The Birmingham Daily Post*. Both Dawson and Dale were disqualified as ministers from seats on the town council, but both served on the Birmingham school board. Dawson also lectured on English literature at the Midland Institute and helped to found the Shakespeare Memorial library in Birmingham. He died suddenly at King’s Norton on the 30th of November 1876. Four volumes of *Sermons*, two of *Prayers* and two of *Biographical Lectures* were published after his death.

See *Life* by H. W. Crosskey (1876) and an article by R. W. Dale in *The Nineteenth Century* (August 1877).

DAWSON, SIR JOHN WILLIAM (1820-1899), Canadian geologist, was bom at Pictou, Nova Scotia, on the 30th of October 1820. Of Scottish descent, he went to Edinburgh to complete his education, and graduated at the university in 1842, having gained a knowledge of geology and natural history from Robert Jameson. On his return to Nova Scotia in 1842 he accompanied Sir Charles Lyell on his first visit to that territory. Subsequently he was appointed to the post of superintendent of education (1850-1853); at the same time he entered zealously into the geology of the country, making a special study of the fossil forests of the coal-measures. From these strata, in company with Lyell (during his second visit) in 1852, he obtained the first remains of an "air-breathing reptile" named *Dendrerpeton*. He also described the fossil plants of the Silurian, Devonian and Carboniferous rocks of Canada for the Geological Survey of that country (1871-1873). From 1855 to 1893 he was professor of geology and principal of M'Gill University, Montreal, an institution which under his influence attained a high reputation. He was elected F.R.S. in 1862. When the Royal Society of Canada was constituted he was the first to occupy the presidential chair, and he also acted as president of the British Association at its meeting at Birmingham in 1886, and of the American Association for the Advancement of Science. Sir William Dawson's name is especially associated with the *Eozoon canadense*, which in 1864 he described as an organism having the structure of a foraminifer. It was found in the Laurentian rocks, regarded as the oldest known geological system. His views on the subject were contested at the time, and have since been disproved, the so-called organism being now regarded as a mineral structure. He was created C.M.G. in 1881, and was knighted in 1884. In his books on geological subjects he maintained a distinctly theological attitude, declining to admit the descent or evolution of man from brute ancestors, and holding that the human species only made its appearance on this earth within quite recent times. Besides many memoirs in the Transactions of learned societies, he published *Acadian Geology: The geological structure, organic remains and mineral resources of Nova Scotia, New Brunswick, and Prince Edward Island* (1855; ed. 3, 1878); *Air-breathers of the Coal Period* (1863); *The Story of the Earth and Man* (1873; ed. 6, 1880); *The Dawn of Life* (1875); *Fossil Men and their Modern Representatives* (1880); *Geological History of Plants* (1888); *The Canadian Ice Age* (1894). He died on the 20th of November 1899.

His son, George Mercer Dawson (1849-1901), was born at Pictou on the 1st of August 1849, and received his education at M'Gill University and the Royal School of Mines, London, where he had a brilliant career. In 1873 he was appointed geologist and naturalist to the North American boundary commission, and two years later he joined the staff of the geological survey of Canada, of which he became assistant director in 1883, and director in 1895. He was in charge of the Canadian government's Yukon expedition in 1887, and his name is permanently written in Dawson City, of gold-bearing fame. As one of the Bering Sea Commissioners he spent the summer of 1891 investigating the facts of the seal fisheries on the northern coasts of Asia and America. For his services there, and at the subsequent arbitration in Paris, he was made a C.M.G. He was elected F.R.S. in 1891, and in the same year was awarded the Bigsby medal by the Geological Society of London. He was president of the Royal Society of Canada in 1893. He died on the 2nd of March 1901. He was the author of many scientific papers and reports, especially on the surface geology and glacial phenomena of the northern and western parts of Canada.

DAWSON CITY, or Dawson, the capital of the Yukon territory, Canada, on the right bank of the Yukon river, and in the middle of the Klondyke gold region, of which it is the distributing centre. It is situated in beautiful mountainous country, 1400 ft. above the sea, and 1500 m. from the mouth of the Yukon river. It is reached by a fleet of river steamers, and has telegraphic communication. Founded in 1896, its population soon reached over 20,000 at the height of the gold rush; in 1901 it was officially returned as 9142, and is now not more than 5000. The temperature varies from 90° F. in summer to 50° below zero in winter. It possesses three opera-houses and numerous hotels, and is a typical mining town, though even at first there was much less lawlessness than is usually the case in such cities.

DAX, a town of south-western France, capital of an arrondissement in the department of Landes, 92 m. S.S.W, of Bordeaux, on the Southern railway between that city and Bayonne. Pop. (1906) 8585. The town lies on the left bank of the Adour, a stone bridge uniting it to its suburb of Le Sablar on the right bank. It has remains of ancient Gallo-Roman fortifications, now converted into a promenade. The most remarkable building in the town is the church of Notre-Dame, once a cathedral; it was rebuilt from 1656 to 1719, but still preserves a sacristy, a porch and a fine sculptured doorway of the 13th century. The church of St Vincent, to the south-west of the town, derives its name from the first bishop, whose tomb it contains. The church of St Paul-lès-Dax, a suburb on the right bank of the Adour, belongs mainly to the 15th century, and has a Romanesque apse adorned with curious bas-reliefs. On a hill to the west of Dax stands a tower built in memory of the sailor and scientist Jean Charles Borda, born there in 1733; a statue was erected to him in the town in 1891. Dax, which is well known as a winter resort, owes much of its importance to its thermal waters

and mud-baths (the deposit of the Adour), which are efficacious in cases of rheumatism, neuralgia and other disorders. The best-known spring is the Fontaine Chaude, which issues into a basin 160 ft. wide in the centre of the town. The principal of numerous bathing establishments are the Grands Thermes, the Bains Salés, adjoining a casino, and the Baignots, which fringe the Adour and are surrounded by gardens. Dax has a sub-prefecture, tribunals of first instance and of commerce, a communal college, a training college and a library. It has salt workings, tanneries, saw-mills, manufactures of soap and corks; commerce is chiefly in the pine wood, resin and cork of the Landes, in mules, cattle, horses and poultry.

Dax (*Aquae Tarbellicae*, *Aquae Augustae*, later *D'Acqs*) was the capital of the Tarbelli under the Roman domination, when its waters were already famous. Later it was the seat of a viscounty, which in the 11th century passed to the viscounts of Béarn, and in 1177 was annexed by Richard Cœur de Lion to Gascony. The bishopric, founded in the 3rd century, was in 1801 attached to that of Aire.

DAY, JOHN (1574-1640?), English dramatist, was born at Cawston, Norfolk, in 1574, and educated at Ely. He became a sizar of Caius College, Cambridge, in 1592, but was expelled in the next year for stealing a book. He became one of Henslowe's playwrights, collaborating with Henry Chettle, William Haughton, Thomas Dekker, Richard Hathway and Wentworth Smith, but his almost incessant activity seems to have left him poor enough, to judge by the small loans, of five shillings and even two shillings, that he obtained from Henslowe. The first play in which Day appears as part-author is *The Conquest of Brute, with the finding of the Bath* (1598), which, with most of his journeyman's work, is lost. A drama dealing with the early years of the reign of Henry VI., *The Blind Beggar of Bednal Green* (acted 1600, printed 1659), written in collaboration with Chettle, is his earliest extant work. It bore the sub-title of *The Merry Humor of Tom Strowd, the Norfolk Yeoman*, and was so popular that second and third parts, by Day and Haughton, were produced in the next year. *The Ile of Guls* (printed 1606), a prose comedy founded upon Sir Philip Sidney's *Arcadia*, contains in its light dialogue much satire to which the key is now lost, but Mr Swinburne notes in Manasses's burlesque of a Puritan sermon a curious anticipation of the eloquence of Mr Chadband in *Bleak House*. In 1607 Day produced, in conjunction with William Rowley and George Wilkins, *The Travailes of the Three English Brothers*, which detailed the adventures of Sir Thomas, Sir Anthony and Robert Shirley.

The Parliament of Bees is the work on which Day's reputation chiefly rests. This exquisite and unique drama, or rather masque, is entirely occupied with "the doings, the births, the wars, the wooings" of bees, expressed in a style at once most singular and most charming. The bees hold a parliament under Prorex, the Master Bee, and various complaints are preferred against the humble-bee, the wasp, the drone and other offenders. This satirical allegory of affairs ends with a royal progress of Oberon, who distributes justice to all. The piece contains much for which parallel passages are found in Dekker's *Wonder of a Kingdom* (1636) and Samuel Rowley's (or Dekker's) *Noble Soldier* (printed 1634). There is no earlier known edition of *The Parliament of Bees* than that in 1641, but a persistent tradition has assigned the piece to 1607. In 1608 Day published two comedies, *Law Trickes, or Who Would have Thought it?* and *Humour out of Breath*. The date of his death is unknown, but an elegy on him by John Tatham, the city poet, was published in 1640. The six dramas by John Day which we possess show a delicate fancy and dainty inventiveness all his own. He preserved, in a great measure, the dramatic tradition of John Lyly, and affected a kind of subdued euphuism. *The Maydes Metamorphosis* (1600), once supposed to be a posthumous work of Lyly's, may be an early work of Day's. It possesses, at all events, many of his marked characteristics. His prose *Peregrinatic Scholastica or Learninges Pilgrimage*, dating from his later years, was printed by Mr A. H. Bullen from a MS. of Day's. Considerations partly based on this work have suggested that he had a share in the anonymous *Pilgrimage to Parnassus* and the *Return from Parnassus*. The beauty and ingenuity of *The Parliament of Bees* were noted and warmly extolled by Charles Lamb; and Day's work has since found many admirers.

His works, edited by A. H. Bullen, were printed at the Chiswick Press in 1881. The same editor included *The Maydes Metamorphosis* in vol. i. of his *Collection of Old Plays*. *The Parliament of Bees* and *Humour out of Breath* were printed in *Nero and other Plays* (Mermaid Series, 1888), with an introduction by Arthur Symons. An appreciation by Mr A. C. Swinburne appeared in *The Nineteenth Century* (October 1897).

DAY, THOMAS (1748-1789), British author, was born in London on the 22nd of June 1748. He is famous as the writer of *Sandford and Merton* (1783-1789), a book for the young, which, though quaintly didactic and often ridiculous, has had considerable educational value as inculcating manliness and independence. Day was educated at the Charterhouse and at Corpus Christi College, Oxford, and became a great admirer of J. J. Rousseau and his doctrine of the ideal state of nature. Having independent means he devoted himself to a life of study and philanthropy. His views on marriage were typical of the man. He brought up two foundlings, one of whom he hoped eventually to marry. They were educated on the severest principles, but neither acquired the high quality of stoicism which he had looked for. After several proposals of marriage to other ladies had been rejected, he married an heiress who agreed with his ascetic programme of life. He finally settled at Ottershaw in Surrey and took to farming on philanthropic principles. He had many curious and impracticable theories, among them one that all animals could be managed by kindness, and while riding an unbroken colt he was thrown near Wargrave and killed on the 28th of September 1789. His poem *The Dying Negro*, published in 1773, struck the keynote of the anti-slavery movement. It is also obvious from his other works, such as *The Devoted Legions* (1776) and *The Desolation of America* (1777), that he strongly sympathized with the Americans during their War of Independence.

DAY (O. Eng. *dæg*, Ger. *Tag*; according to the *New English Dictionary*, "in no way related to the Lat. *dies*"), in astronomy, the interval of time in which a revolution of the earth on its axis is performed. Days are distinguished as solar, sidereal or lunar, according as the revolution is taken relatively to the sun, the stars or the moon. The solar day is the fundamental unit of time, not only in daily life but in astronomical practice. In the latter case, being determined by observations of the sun, it is taken to begin with the passage of the mean sun over the meridian of the place, or at mean noon, while the civil day begins at midnight. A vigorous effort was made during the last fifteen years of the 19th century to bring the two uses into harmony by beginning the astronomical day at midnight. In some isolated cases this has been done; but the general consensus of astronomers has been against it, the day as used in astronomy being only a measure of time, and having no relation to the period of daily repose. The time when the day shall begin is purely a matter of convenience. The present practice being the dominant one from the time of Ptolemy until the present, it was felt that the confusion in the combination of past and present astronomical observations, and the doubts and difficulties in using the astronomical ephemerides, formed a decisive argument against any change.

The question of a possible variability in the length of the day is one of fundamental importance. One necessary effect of the tidal retardation of the earth's rotation is gradually to increase this length. It is remarkable that the discussion of ancient eclipses of the moon, and their comparison with modern observations, show only a small and rather doubtful change, amounting perhaps to less than one-hundredth of a second per century. As this amount seems to be markedly less than that which would be expected from the cause in question, it is probable that some other cause tends to accelerate the earth's rotation and so to shorten the day. The moon's apparent mean motion in longitude seems also to indicate slow periodic changes in the earth's rotation; but these are not confirmed by transits of Mercury, which ought also to indicate them. (See Moon and Tides.)

(S. N.)

Legal Aspects.—In law, a day may be either a *dies naturalis* or natural day, or a *dies artificialis* or artificial day. A natural day includes all the twenty-four hours from midnight to midnight. Fractions of the day are disregarded to avoid dispute, though sometimes the law will consider fractions, as where it is necessary to show the first of two acts. In cases where action must be taken for preserving or asserting a right, a day would mean the natural day of twenty-four hours, but on the other hand, as in cases of survivorship, for testamentary or other purposes, it would suffice if a person survived for even the smallest portion of the last day necessary.

When a statute directs any act to be done within so many days, these words mean *clear days*, *i.e.* a number of perfect intervening days, not counting the terminal days: if the statute says nothing about Sunday, the days mentioned mean consecutive days and include Sundays. Under some statutes (*e.g.* the Parliamentary Elections Act 1868, the Corrupt and Illegal Practices Prevention Act 1883) Sundays and holidays are excluded in reckoning days, and consequently all the Sundays, &c., of a prescribed sequence of days would be eliminated. So also, by custom, the word "day" may be understood in some special sense. In bills of lading and charter parties, when "days" or "running days" are spoken of without qualification, they usually mean consecutive days, and Sundays and holidays are counted, but when there is some qualification, as where a charter party required a cargo "to be discharged in fourteen days," "days" will mean *working days*. Working days, again, vary in different ports, and the custom of the port will decide in each case what are working days. In English charter parties, unless the contrary is expressed, Christmas day and other recognized holidays are included as working days. A *weather working day*, a term sometimes used in charter parties, means a day when work is not prevented by the weather, and unless so provided for, a day on which work was rendered impossible by bad weather would still be counted as a working day. *Lay days*, which are days given to the charterer in a charter party either to load or unload without paying for the use of the ship, are days of the week, not periods of twenty-four hours.

Days of Grace.—When a bill of exchange is not payable at sight or on demand, certain days (called days of grace, from being originally a gratuitous favour) are added to the time of payment as fixed by the bill, and the bill is then due and payable on the last day of grace. In the United Kingdom, by the Bills of Exchange Act 1882, three days are allowed as days of grace, but when the last day of grace falls on Sunday, Christmas day, Good Friday or a day appointed by royal proclamation as a public fast or thanksgiving day, the bill is due and payable on the preceding business day. If the last day of grace is a bank holiday (other than Christmas day or Good Friday), or when the last day of grace is a Sunday, and the second day of grace is a bank holiday, the bill is due and payable on the succeeding business day. Days of grace (*dies non*) are in existence practically among English-speaking peoples only. They were abolished by the French Code (Code de Commerce, Liv. i. tit. 8, art. 135), and by most, if not all, of the European codes since framed.

Civil Days.—An artificial or civil day is, to a certain extent, difficult to define; it "may be regarded as a convenient term to signify all the various kinds of 'day' known in legal proceedings other than the natural day." (*Ency. English Law*, tit. "Day"). The Jews, Chaldeans and Babylonians began the day at the rising of the sun; the Athenians at the fall; the Umbri in Italy began at midday; the Egyptians and Romans at midnight; and in England, the United States and most of the countries of Europe the Roman civil day still prevails, the day usually commencing as soon as the clock begins to strike 12 P.M. of the preceding day.

In England the period of the civil day may also vary under different statutes. In criminal law the day formerly commenced at sunrise and extended to sunset, but by the Larceny Act 1861 the day is that period between six in the morning and nine in the evening. The same period of time comprises a day under the Housing of the Working Classes Act 1885 and the Public Health (London) Act 1891, but under the Public Health (Scotland) Act 1897 "day" is the period between 9 A.M. and 6 P.M. By an act of 1845, regulating the labour of children in print-works, "day" is defined as from 6 A.M. to 10 P.M. Daytime, within which distress for rent must be made, is from sunrise to sunset (*Tulton* v. *Darke*, 1860, 2 L.T. 361). An obligation to pay money

on a certain day is theoretically discharged if the money is paid before midnight of the day on which it falls due, but custom has so far modified this that the law requires reasonable hours to be observed. If, for instance, payment has to be made at a bank or place of business, it must be within business hours.

When an act of parliament is expressed to come into operation on a certain day, it is to be construed as coming into operation on the expiration of the previous day (Interpretation Act 1889, § 36; Statutes [Definition of Time] Act 1880).

Under the orders of the supreme court the word "day" has two meanings. For purposes of personal service of writs, it means any time of the day or night on week-days, but excludes the time from twelve midnight on Saturday till twelve midnight on Sunday. For purposes of service not required to be personal, it means before six o'clock on any week-day except Saturday, and before 2 P.M. on Saturday.

Closed Days, i.e. Sunday, Christmas day and Good Friday, are excluded from all fixtures of time less than six days: otherwise they are included, unless the last day of the time fixed falls on one of those days (R.S.C., O. lxiv.).

American Practice.—In the United States a day is the space of time between midnight and midnight. The law pays no regard to fractions of a day except to prevent injustice. A "day's work" is by statute in New York fixed at eight hours for all employees except farm and domestic servants, and for employees on railroads at ten hours (Laws 1897, ch. 415). In the recording acts relating to real property, fractions of a day are of the utmost importance, and all deeds, mortgages and other instruments affecting the property, take precedence in the order in which they were filed for record. Days of grace are abolished in many of the seventeen states in which the Negotiable Instruments law has been enacted. Sundays and public holidays are usually excluded in computing time if they are the last day within which the act was to be done. General public holidays throughout the United States are Christmas, Thanksgiving (last Thursday in November) and Independence (July 4th) days and Washington's birthday (February 22nd). The several states have also certain local public holidays. (See also MONTH; TIME.)

(T. A. I.)

DAYLESFORD, a town of Talbot county, Victoria, Australia, 74 m. by rail N.W. of Melbourne. Pop. (1901) 3384. It lies on the flank of the Great Dividing Range, at an elevation of 2030 ft. On Wombat Hill are beautiful public gardens commanding extensive views, and a fine convent of the Presentation Order. Much wheat is grown in the district, and gold-mining, both quartz and alluvial, is carried on. Daylesford has an important mining school. Near the town are the Hepburn mineral springs and a number of beautiful waterfalls, and 6 m. from it is Mount Franklin, an extinct volcano.

DAYTON, a city of Campbell county, Kentucky, U.S.A., on the S. bank of the Ohio river, opposite Cincinnati, and adjoining Bellevue and Newport, Ky. Pop. (1890) 4264; (1900) 6104 including 655 foreign-born and 63 negroes; (1910) 6979. It is served by the Chesapeake & Ohio railway at Newport, of which it is a suburb, largely residential. It has manufactories of watch-cases and pianos, and whisky distilleries. In the city is the Speers Memorial hospital. Dayton was settled and incorporated in 1849.

DAYTON, a city and the county-seat of Montgomery county, Ohio, U.S.A., at the confluence of Wolf Creek, Stillwater river and Mad river with the Great Miami, 57 m. N.N.E. of Cincinnati and about 70 m. W.S.W. of Columbus. Pop. (1890) 61,220; (1900) 85,333; (1910) 116,577. In 1900 there were 10,053 foreign-born and 3387 negroes; of the foreign-born 6820 were Germans and 1253 Irish. Dayton is served by the Erie, the Cleveland, Cincinnati, Chicago & St Louis, the Pittsburg, Cincinnati, Chicago & St Louis, the Cincinnati, Hamilton & Dayton, and the Dayton & Union railways, by ten interurban electric railways, centring here, and by the Miami & Erie Canal. The city extends more than 5 m. from E. to W., and 3½ m. from N. to S., lies for the most part on level ground at an elevation of about 740 ft. above sea-level, and numerous good, hard gravel roads radiate from it in all directions through the surrounding country, a fertile farming region which abounds in limestone, used in the construction of public and private buildings. Among the more prominent buildings are the court-house—the portion first erected being designed after the Parthenon—the Steele high school, St Mary's college, Notre Dame academy, the Memorial Building, the Arcade Building, Reibold Building, the Algonquin Hotel, the post office, the public library (containing about 75,000 volumes), the Young Men's Christian Association building and several churches. At Dayton are the Union Biblical seminary, a theological school of the United Brethren in Christ, and the publishing house of the same denomination. By an agreement made in 1907 the school of theology of Ursinus College (Collegeville, Pennsylvania; the theological school since 1898 had been in Philadelphia) and the Heidelberg Theological seminary (Tiffin, Ohio) united to form the Central Theological seminary of the German Reformed Church, which was established in Dayton in 1908. The boulevard and park along the river add attractiveness to the city. Among the charitable institutions are the Dayton state hospital (for the insane), the Miami Valley and the St

Elizabeth hospitals, the Christian Deaconess, the Widows' and the Children's homes, and the Door of Hope (for homeless girls); and 1 m. W. of the city is the central branch of the National Home for disabled volunteer soldiers, with its beautifully ornamented grounds, about 1 sq. m. in extent. The Mad river is made to furnish good water-power by means of a hydraulic canal which takes its water through the city, and Dayton's manufactures are extensive and varied, the establishments of the National Cash Register Company employing in 1907 about 4000 wage-earners. This company is widely known for its "welfare work" on behalf of its operatives. Baths, lunch-rooms, rest-rooms, clubs, lectures, schools and kindergartens have been supplied, and the company has also cultivated domestic pride by offering prizes for the best-kept gardens, &c. From April to July 1901 there was a strike in the already thoroughly unionized factories; complaint was made of the hectoring of union men by a certain foreman, the use in toilet-rooms of towels laundered in non-union shops (the company replied by allowing the men to supply towels themselves), the use on doors of springs not union-made (these were removed by the company), and especially the discharge of four men whom the company refused to reinstate. The company was victorious in the strike, and the factory became an "open shop." In addition to cash registers, the city's manufactured products include agricultural implements, clay-working machinery, cotton-seed and linseed oil machinery, filters, turbines, railway cars (the large Barney-Smith car works employed 1800 men in 1905), carriages and wagons, sewing-machines (the Davis Sewing Machine Co.), automobiles, clothing, flour, malt liquors, paper, furniture, tobacco and soap. The total value of the manufactured product, under the "factory system," was $31,015,293 in 1900 and $39,596,773 in 1905. Dayton's site was purchased in 1795 from John Cleves Symmes by a party of Revolutionary soldiers, and it was laid out as a town in 1796 by Israel Ludlow (one of the owners), by whom it was named in honour of Jonathan Dayton (1760-1824), a soldier in the War of Independence, a member of Congress from New Jersey in 1791-1799, and a United States senator in 1799-1805. It was made the county-seat in 1803, was incorporated as a town in 1805, grew rapidly after the opening of the canal in 1828, and in 1841 was chartered as a city.

DEACON (Gr. διάκονος, minister, servant), the name given to a particular minister or officer of the Christian Church. The status and functions of the office have varied in different ages and in different branches of Christendom.

(*a*) *The Ancient Church.*—The office of deacon is almost as old as Christianity itself, though it is impossible to fix the moment at which it came into existence. Tradition connects its origin with the appointment of "the Seven" recorded in Acts vi. This connexion, however, is questioned by a large and increasing number of modern scholars, on the ground that "the Seven" are not called deacons in the New Testament and do not seem to have been identified with them till the time of Irenaeus (A.D. 180). The first definite reference to the diaconate occurs in St Paul's Epistle to the Philippians (i. 1), where the officers of the Church are described as "bishops and deacons"—though it is not unlikely that earlier allusions are to be found in 1 Cor. xii. 28 and Romans xii. 7. In the pastoral epistles the office seems to have become a permanent institution of the Church, and special qualifications are laid down for those who hold it (1 Tim. iii. 8). By the time of Ignatius (A.D. 110) the "three orders" of the ministry were definitely established, the deacon being the lowest of the three and subordinate to the bishop and the presbyters. The inclusion of deacons in the "three orders" which were regarded as essential to the existence of a true Church sharply distinguished them from the lower ranks of the ministry, and gave them a status and position of importance in the ancient Church.

The functions attaching to the office varied at different times. In the apostolic age the duties of deacons were naturally vague and undefined. They were "helpers" or "servants" of the Church in a general way and served in any capacity that was required of them. With the growth of the episcopate, however, the deacons became the immediate ministers of the bishop. Their duties included the supervision of Church property, the management of Church finances, the visitation of the sick, the distribution of alms and the care of widows and orphans. They were also required to watch over the souls of the flock and report to the bishop the cases of those who had sinned or were in need of spiritual help. "You deacons," says the Apostolical Constitutions (4th century), "ought to keep watch over all who need watching or are in distress, and let the bishop know." With the growth of hospitals and other charitable institutions, however, the functions of deacons became considerably curtailed. The social work of the Church was transferred to others, and little by little the deacons sank in importance until at last they came to be regarded merely as subordinate officers of public worship, a position which they hold in the Roman Church to-day, where their duties are confined to such acts as the following:—censing the officiating priest and the choir, laying the corporal on the altar, handing the paten or cup to the priest, receiving from him the pyx and giving it to the subdeacon, putting the mitre on the archbishop's head (when he is present) and laying his pall upon the altar.

(*b*) *The Church of England.*—The traditionary position of the diaconate as one of the "three orders" is here maintained. Deacons may conduct any of the ordinary services in the church, but are not permitted to pronounce the absolution or consecrate the elements for the Eucharist. In practice the office has become a stepping-stone to the priesthood, the deacon corresponding to the licentiate in the Presbyterian Church. Candidates for the office must have attained the age of twenty-three and must satisfy the bishop with regard to their intellectual, moral and spiritual fitness. The functions of the office are defined in the Ordinal—"to assist the priest in divine service and specially when he ministereth the Holy Communion, to read Holy Scriptures and Homilies in the church, to instruct the youth in the catechism, to baptize in the absence of the priest, to preach if he be admitted thereto by the bishop, and furthermore to search for the sick, poor and impotent people and intimate their estates and names to the curate."

(*c*) *Churches of the Congregational Order.*—In these (which of course include Baptists) the diaconate is a body of laymen appointed by the members of the church to act as a management committee and to assist the minister in the work of the church. There is no general rule as to the number of deacons, though the

traditionary number of seven is often kept, nor as to the frequency of election, each church making its own arrangements in this respect. The deacons superintend the financial affairs of the church, co-operate with the minister in the various branches of his work, assist in the visitation of the sick, attend to the church property and generally supervise the activities of the church.

See Thomassinus, *Vetus ac nova disciplina*, pars i. lib. i. c. 51 f. and lib. ii. c. 29 f. (Lugdunum, 1706); J. N. Seidl, *Der Diakonat in der katholischen Kirche* (Regensburg, 1884); R. Sohm, *Kirchenrecht*, i. 121-137 (Leipzig, 1892); F. J. A. Hort, *The Christian Ecclesia* (London, 1897).

DEACONESS (ἡ διάκονος or διακόνισσα, servant, minister), the name given to a woman set apart for special service in the Christian Church. The origin and early history of the office are veiled in obscurity. It is quite certain that from the 3rd century onward there existed in the Eastern Church an order of women, known as deaconesses, who filled a position analogous to that of deacons. They are quite distinct from the somewhat similar orders of "virgins" and "widows," who belonged to a lower plane in the ecclesiastical system. The order is recognized in the canons of the councils of Nicaea (325) and Chalcedon (451), and is frequently mentioned in the writings of Chrysostom (some of whose letters are addressed to deaconesses at Constantinople), Epiphanius, Basil, and indeed most of the more important Fathers of the 4th and 5th centuries. Deaconesses, upon entering their office, were ordained much in the same way as deacons, but the ordination conveyed no sacerdotal powers or authority. Epiphanius says quite distinctly that they were woman-elders and not priestesses in any sense of the term, and that their mission was not to interfere with the functions allotted to priests but simply to perform certain offices in connexion with the care of women. Several specimens of the ordination service for deaconesses have been preserved (see Cecilia Robinson, *The Ministry of Deaconesses*, London, 1878, appendix B, p. 197). The functions of the deaconess were as follows: (1) To assist at the baptism of women, especially in connexion with the anointing of the body which in the ancient Church always preceded immersion; (2) to visit the women of the Church in their homes and to minister to the needs of the sick and afflicted; (3) according to the Apostolical Constitutions they acted as door-keepers in the church, received women as they entered and conducted them to their allotted seats. In the Western Church, on the other hand, we hear nothing of the order till the 4th century, when an attempt seems to have been made to introduce it into Gaul. Much opposition, however, was encountered, and the movement was condemned by the council of Orange in 441 and the council of Epaone in 517. In spite of the prohibition the institution made some headway, and traces of it are found later in Italy, but it never became as popular in the West as it was in the East. In the middle ages the order fell into abeyance in both divisions of the Church, the abbess taking the place of the deaconess. Whether deaconesses, in the later sense of the term, existed before 250 is a disputed point. The evidence is scanty and by no means decisive. There are only three passages which bear upon the question at all. (i) Romans xvi. 1: Phoebe is called ἡ διάκονος, but it is quite uncertain whether the word is used in its technical sense. (ii) 1 Tim. iii. 11: after stating the qualifications necessary for deacons the writer adds, "Women in like manner must be grave—not slanderers," &c.; the Authorized Version took the passage as referring to deacons' wives, but many scholars think that by "women" deaconesses are meant. (iii) In Pliny's famous letter to Trajan respecting the Christians of Bithynia mention is made of two Christian maidservants "*quae ministrae dicebantur*"; whether *ministrae* is equivalent to διάκονοι, as is often supposed, is dubious. On the whole the evidence does not seem sufficient to prove the contention that an order of deaconesses—in the ecclesiastical sense of the term—existed from the apostolic age.

In modern times several attempts have been made to revive the order of deaconesses. In 1833 Pastor Fleidner founded "an order of deaconesses for the Rhenish provinces of Westphalia" at Kaiserswerth. The original aim of the institution was to train nurses for hospital work, but its scope was afterwards extended and it trained its members for teaching and parish work as well. Kaiserswerth became the parent of many similar institutions in different parts of the continent. A few years later, in 1847, Miss Sellon formed for the first time a sisterhood at Devonport in connexion with the Church of England. Her example was gradually followed in other parts of the country, and in 1898 there were over two thousand women living together in different sisterhoods. The members of these institutions do not represent the ecclesiastical deaconesses, however, since they are not ministers set apart by the Church; and the sisterhoods are merely voluntary associations of women banded together for spiritual fellowship and common service. In 1861 Bishop Tait set apart Miss Elizabeth Ferard as a deaconess by the laying on of hands, and she became the first president of the London Deaconess Institution. Other dioceses gradually adopted the innovation. It has received the sanction of Convocation, and the Lambeth Conference in 1897 declared that it "recognized with thankfulness the revival of the office of deaconess," though at the same time it protested against the indiscriminate use of the title and laid it down emphatically that the name must be restricted to those who had been definitely set apart by the bishop for the position and were working under the direct supervision and control of the ecclesiastical authority in the parish.

In addition to Miss Robinson's book cited above, see *Church Quarterly Review*, xlvii. 302 ff., art. "On the Early History and Modern Revival of Deaconesses" (London, 1899), and the works there referred to; D. Latas, Χριστιανικὴ Ἀρχαιολογία, i. 163-171 (Athens, 1883); *Testamentum Domini*, ed. Rahmani (Mainz, 1899); L. Zscharnack, *Der Dienst der Frau in den ersten Jahrhunderten der chr. Kirche* (1902).

DEAD SEA, a lake in Palestine occupying the deepest part of the valley running along the line of a great

“fault” that has been traced from the Gulf of Akaba (at the head of the Red Sea) to Hermon. This fracture was caused after the end of the Eocene period by the earth-movement which resulted in the raising of the whole region out of the sea. Level for level, the more ancient rocks are on the eastward side of the lake: the cretaceous limestones that surmount the older volcanic substrata come down on the western side to the water’s edge, while on the eastern side they are raised between 3000 and 4000 feet above it. In the Pleistocene period the whole of this depression was filled with water forming a lake about 200 m. long north to south, whose waters were about the same level as that of the Mediterranean Sea. With the diminishing rainfall and increased temperature that followed that period the effects of evaporation gradually surpassed the precipitation, and the waters of the lake slowly diminished to about the extent which they still display.

The length of the sea is 47 m., and its maximum breadth is about 9½ m.; its area is about 340 sq. m. It lies nearly north and south. Its surface being 1289-1300 ft. below the level of the Mediterranean Sea, it has of course no outlet. It is bounded on the north by the broad valley of the Jordan; on the east by the rapidly rising terraces which culminate in the Moabite plateau, 3100 ft. above the level of the lake; on the south by the desert of the Arabah, which rises to the watershed between the Dead and the Red Sea—65½ m. from the former, 46½ from the latter; height 660 ft.—and on the west by the Judean mountains which attain a height of 3300 ft. On the east side a peninsula, El-Lisān (“the tongue”), of white calcareous marl with beds of salt and gypsum, divides the sea into two unequal parts: this peninsula is about 50 ft. high, and is connected by a narrow strip of marshland with the shore. Its northern and southern extremities have been named Cape Costigan and Cape Molyneux, in memory of two explorers who were among the first in modern times to navigate the sea and succumbed to the consequent fever and exhaustion. North of the peninsula the lake has a maximum depth of 1278 ft.; south of it the water is nowhere more than 12 ft., and in some places only 3 ft. The surface level of the lake varies with the season, and recent observations taken on behalf of the Palestine Exploration Fund seem to show that there are probably cyclical variations also (ultimately dependent on the rainfall), the nature and periodicity of which there are as yet no sufficient data to determine. In 1858 there was a small island near the north end rising 10 or 12 ft. above the surface and connected with the shore by a causeway; this has been submerged since 1892; and owing to the gradual rise of level within these years the fords south of the Lisān, and the pathway which formerly rounded the Ras Feshkhah, are now no longer passable.

The slopes on each side of the sea are furrowed with watercourses, some of them perennial, others winter torrents only. The chief affluents of the sea are as follows:—on the north, Jordan and ‘Ain es-Suweimeh; on the east Wadis Ghuweir, Zerka Ma’in (Callirrhoë), Mōjib (Arnon), Ed-Dera’a, and el-Hesi; on the west, Wadis Muhawāt and Seyāl, ‘Ain Jidi (En-Gedi), Wadi el Merabbah, ‘Ain Ghuweir, Wadi el-Nar, ‘Ain Feshkhah. The quantity of water poured daily into the sea is not less than 6,000,000 tons, all of which has to be carried off by evaporation. The consequence of the ancient evaporation, by which the great Pleistocene lake was reduced to its present modest dimensions, and of the ceaseless modern daily evaporation, is the impregnation of the waters of the lake with salts and other mineral substances to a remarkable degree. Ocean water contains on an average 4-6% of salts: Dead Sea water contains 25%. The following analysis, by Dr Bernays, gives the contents of the water more accurately:—

Specific gravity 1.1528 at 15.5° C.

Calcium carbonate	70.00	grains
Calcium sulphate	163.39	
Magnesium nitrate	175.01	
Potassium chloride	1089.06	
Sodium chloride	5106.00	
Calcium chloride	594.46	
Magnesium chloride	7388.21	
Magnesium bromide	345.80	
Iron and aluminium oxides	10.50	
Organic matter, water of crystallization, loss	317.57	
Total residue per gallon	15260.00	

The density of the water averages 1.166. It increases from north to south, and with the depth. The increase is at first rapid, then, after reaching a certain point, becomes more uniform. At 300 metres its density is 1.253. The boiling point is 221° F. To the quantity of solid matter suspended in its water the Dead Sea owes, beside its saltness, its buoyancy and its poisonous properties. The human body floats on the surface without exertion. Owing principally to the large proportion of chloride and bromide of magnesia no animal life can exist in its water. Fish, which abound in the Jordan and in the brackish spring-fed lagoons that exist in one or two places around its shores (such as ‘Ain Feshkhah), die in a very short time if introduced into the main waters of the lake. The only animal life reported from the lake has been some tetanus and other bacilli said to have been found in its mud; but this discovery has not been confirmed. To the chloride of calcium is due the smooth and oily feeling of the water, and to the chloride of magnesia its disagreeable taste. In Roman times curative properties were ascribed to the waters: Mukaddasi (A.D. 985) asserts that people assembled to drink it on a feast day in August. The salt of the Dead Sea is collected and sold in Jerusalem; smuggling of salt (which in Turkey is a government monopoly) is a regular occupation of the Bedouin. The bitumen which floats to shore is also collected. The origin of this bitumen is disputed: it was supposed to be derived from subaqueous strata of bituminous marl and rose to the surface when loosened by earthquakes. It is, however, now more generally believed that it exists in the breccia of some of the valleys on the west side of the lake, which is washed into the sea and submerged, till the small stones by which it is sunk are loosened and fall out, when the bitumen rises to the surface.

History.—The earliest references to the sea or its basin are in the patriarchal narratives of Lot and Abraham, the most striking being the destruction of the neighbouring cities of Sodom and Gomorrah. (See Sodom.) The biblical name is the Salt Sea, the Sea of the Arabah (the south end of the Jordan valley), or the East Sea. The name in Josephus is *Asphaltites*, referring to the bituminous deposits above alluded to. The

modern name is Bahr Lūt or “Sea of Lot”—a name hardly to be explained as a survival of a vague tradition of the patriarch, but more probably due to the literary influences of the Hebrew Scriptures and the Koran filtering through to the modern inhabitants or their ancestors. The name Dead Sea first appears in late Greek writers, as Pausanias and Galen. At En-Gedi on its western bank David for a while took refuge. South of it is the stronghold of Masada, built by Jonathan Maccabaeus and fortified by Herod in 42 B.C., where the last stand of the Jews was made against the Romans after the fall of Jerusalem, and where the garrison, when the defences were breached, slew themselves rather than fall into Roman hands.

The sea has been but little navigated. Tacitus and Josephus mention boats on the lake, and boats are shown upon it in the Madeba mosaic. The navigation dues formed part of the revenue of the lords of Kerak under the crusaders. In modern times navigation is practically *nil*. The lake, with the whole Jericho plain, is claimed as the personal property of the sultan.

The medieval travellers brought home many strange legends of the sea and its peculiarities—some absurd, others with a basis of fact. The absence of sea-birds, due to the absence of fish, probably accounts for the story that no birds could fly over it. The absence of vegetation on its shores, due to the scanty rainfall and general want of fresh water—except in the neighbourhood of springs like ‘Ain Feshkhah and ‘Ain Jidi, where a luxuriant subtropical vegetation is found—accounts for the story that no plant could live in the poisonous air which broods over the sea. The mists, due to the great heat and excessive evaporation, and the noxious miasmata, especially of the southern region, were exaggerated into the noisome vapours that the “black and stinking” waters ever exhaled. The judgment on Sodom and Gomorrah (which of course they believed to be *under* the waters of the lake, in accordance with the absurd theory first found in Josephus and still often repeated) blinded these good pilgrims to the ever-fresh beauty of this most lovely lake, whose blue and sparkling waters lie deep between rocks and precipices of unsurpassable grandeur. The play of brilliant colours and of ever-changing contrasts of light and shade on those rugged mountain-sides and on the surface of the sea itself might have been expected to appeal to the most prosaic. The surface of the sea is generally smooth (seldom, however, absolutely inert as the pilgrims represented it), but is frequently raised by the north winds into waves, which, owing to the weight and density of the water, are often of great force.

The first to navigate the sea in modern times was an Irish traveller, Costigan by name, in August and September 1835. Owing largely to the folly of his Greek servant, who, without his master’s knowledge, threw overboard the drinking-water to lighten the boat, the explorer after circumnavigating the sea reached Jericho in an exhausted condition, and was there attacked by a severe fever. The greatest difficulty was experienced in obtaining assistance for him, but he was ultimately conveyed on camel-back to Jerusalem, where he died; his grave is in the Franciscan cemetery there. His fate was shared by his successor, a British naval officer, Lieutenant Molyneux (1847), whose party was attacked and robbed by Bedouins. W. F. Lynch, an American explorer (1848), equipped by the United States government, was more successful, and he may claim to be the first who examined its shores and sounded its depths. Since his time the duc de Luynes, Lartet, Wilson, Hull, Blanckenhorn, Gautier, Libbey, Masterman and Schmidt, to name but a few, have made contributions to our knowledge of this lake; but still many problems present themselves for solution. Among these may be mentioned (1) the explanation of a remarkable line of white foam that extends along the axis of the lake almost every morning—supposed by Blanckenhorn to mark the line of a fissure, thermal and asphaltic, under the bed of the lake, but otherwise explained as a consequence of the current of the Jordan, which is not completely expended till it reaches the Lisān, or as a result of the mingling of the salt water with the brackish spring water especially along the western shore; (2) a northward current that has been observed along the east coast; (3) various disturbances of level, due possibly to differences of barometric pressure; (4) some apparently electrical phenomena that have been observed in the valley. Before we can be said to know all that we might regarding this most interesting of lakes further extensive scientific observations are necessary; but these are extremely difficult owing to the impossibility of maintaining self-registering instruments in a region practically closed to Europeans for nearly half the year by the stifling heat, and inhabited only by Bedouins, who are the worst kind of ignorant, thievish and mischievous savages.

(R. A. S. M.)

DEADWOOD, a city and the county-seat of Lawrence county, South Dakota, U.S.A., about 180 m. W. of Pierre. Pop. (1890) 2366; (1900) 3498, of whom 707 were foreign-born; (1905) 4364; (1910) 3653. It is served by the Chicago, Burlington & Quincy and the Chicago & North-Western railways. It lies on hilly ground in the canyon of Whitewood Creek at an elevation of about 4530 ft. Deadwood is the commercial centre of the Black Hills. About it are several gold mines (including the well-known Home-stake mine), characterized by the low grade of their ores (which range from $2 to $8 per ton), by their vast quantity, and by the ease of mining and of extracting the metal. The ore contains free gold, which is extracted by the simple process of stamping and amalgamation, and refractory values, extracted by the cyaniding process. Several hundred tons of ore are treated thus in Deadwood and its environs daily, and its stamp mills are exceeded in size only by those of the Treadwell mine in S.E. Alaska, and by those on the Rand in South Africa. The discovery of gold here was made known in June 1875, and in February 1877 the United States government, after having purchased the land from the Sioux Indians, opened the place for legal settlement.

DEAF AND DUMB.[1] The term “deaf” is frequently applied to those who are deficient in hearing power in any degree, however slight, as well as to people who are unable to detect the loudest sounds by means of the

auditory organs. It is impossible to draw a hard and fast line between the deaf and the hearing at any particular point. For the purposes of this article, however, that denotation which is generally accepted by educators of the deaf may be given to the term. This makes it refer to those who are so far handicapped as to be incapable of instruction by the ordinary means of the ear in a class of those possessing normal hearing. Paradoxical though it may seem, it is yet true to say that “dumbness” in our sense of the word does not, strictly speaking, exist, though the term “dumb” may, for all practical purposes, fairly be applied to many of the deaf even after they are supposed to have learnt how to speak. Oral teachers now confess that it is not worth while to try to teach more than a large percentage of the deaf to speak at all. We are not concerned with aphasia, stammering or such inability to articulate as may be due to malformation of the vocal organs. In the case of the deaf and dumb, as these words are generally understood, dumbness is merely the result of ignorance in the use of the voice, this ignorance being due to the deafness. The vocal organs are perfect. The deaf man can laugh, shout, and in fact utter any and every sound that the normal person can. But he does not speak English (if that happens to be his nationality) for the same reason that a French child does not, which is that he has never heard it. There is in fact no more a priori reason why an English baby, born in England, should talk English than that it should talk any other language. English may be correctly described as its “mother tongue,” but not its *natural* language; the only reason why one person speaks English and another Russian is that each imitated that particular language which he heard in infancy. This imitation depends upon the ability to hear. Hence if one has never heard, or has lost hearing in early childhood, he has never been able to imitate that language which his parents and others used, and the condition of so-called dumbness is added to his deafness. From this it follows that if the sense of hearing be not lost till the child has learnt to speak fluently, the ability to speak is unaffected by the calamity of deafness, except that after many years the voice is likely to become high-pitched, or too guttural, or peculiar in some other respect, owing to the absence of the control usually exercised by the ear. It also follows that, to a certain extent, the art of speech can be taught the deaf person even though he were born deaf. Theoretically, he is capable of talking just as well as his hearing brother, for the organs of speech are as perfect in one as in the other, except that they suffer from lack of exercise in the case of the deaf man. Practically, he can never speak perfectly, for even if he were made to attempt articulation as soon as he is discovered to be deaf, the fact that the ear, the natural guide of the voice, is useless, lays upon him a handicap which can never be wiped out. He can never hear the tone of his teacher’s voice nor of his own; he can only see small and, in many instances, scarcely discernible movements of the lips, tongue, nose, cheeks and throat in those who are endeavouring to teach him to speak, and he can never hope to succeed in speech through the instrumentality of such unsatisfactory appeals to his eye as perfectly as the hearing child can with the ideal adaptation of the voice to the ear. Sound appeals to the ear, not the eye, and those who have to rely upon the latter to imitate speech must suffer by comparison.

Deafness then, in our sense, means the incapacity to be instructed by means of the ear in the normal way, and dumbness means only that ignorance of how to speak one’s mother tongue which is the effect of the deafness.

Of such deaf people many can hear sound to some extent. Dr Kerr Love quotes several authorities (*Deaf Mutism*, pp. 58 ff.) to show that 50 or 60% are absolutely deaf, while 25% can detect loud sounds such as shouting close to the ear, and the rest can distinguish vowels or even words. He himself thinks that not more than 15 or 20% are totally deaf—sometimes only 7 or 8%; that ability to hear speech exists in about one in four, while ten or fifteen in each hundred are only semi-deaf. He rightly warns against the use of tuning forks or other instruments held on the bones of the head as tests of hearing, because the vibration which is felt, not heard, may very often be mistaken for sound.

Dr Edward M. Gallaudet, president of the Columbia Institution for the Deaf in Washington, D.C., suggests the following terms for use in dividing the whole class of the deaf into its main sections, though it is obviously impossible to split them up into perfectly defined subdivisions, where, as a matter of fact, you have each degree of deafness and dumbness shading into the next:—the *speaking deaf*, *the semi-speaking deaf*, the *mute deaf* (or *deaf-mute*), the *speaking semi-deaf*, the *mute semi-deaf*, the *hearing mute* and the *hearing semi-mute*. He points out that the last two classes are usually persons of feeble mental power. We should exclude these altogether from the list, since their hearing is, presumably, perfect, and should add the *semi-speaking semi-deaf* before the mute semi-deaf. This would give two main divisions—those who cannot hear at all, and those who have partial hearing—with three subsections in each main division—those who speak, those who have partial speech and those who do not speak at all. Where the hearing is perfect it is paradoxical to class a person with the deaf, and the dumbness in such a case is due (where there is no malformation of the vocal organs) to inability of the mind to pay attention to, and imitate, what the ear really hears. In such cases this mental weakness is generally shown in other ways besides that of not hearing sounds. Probably no sign will be given of recognizing persons or objects around; there will be in fact, a general incapacity of the whole body and senses. It is incorrect to designate such persons as deaf and feeble-minded or deaf and idiotic, because in many cases their organs of hearing are as perfect as are other organs of their body, and they are no more deaf than blind, though they may pay no attention to what they hear any more than to what they see. They are simply weak in intellect, and this is shown by the disuse of any and all of their senses; hence it is incorrect to classify them according to one, and one only, of the evidences of this mental weakness.

Extent of Deafness.—The following table shows the number of deaf and dumb persons in the United Kingdom at successive censuses:—

Year.	Number of Deaf and Dumb Persons.			
	United Kingdom.	England & Wales.	Scotland.	Ireland.
1851	17,649	10,314	2155	5180
1861	20,224	12,236	2335	5653
1871	19,159	11,518	2087	5554
1881	20,573	13,295	2142	5136
1891	20,781	14,192	2125	4464

1901	21,855	15,246	2638	3971

From this we find that the proportion of deaf and dumb to the population has been as follows:—

Year.	Proportion of Deaf and Dumb to the Population.			
	United Kingdom.	England & Wales.	Scotland.	Ireland.
1851	1 in 1550	1 in 1739	1 in 1340	1 in 1264
1861	1 in 1430	1 in 1639	1 in 1310	1 in 1025
1871	1 in 1642	1 in 1972	1 in 1610	1 in 974
1881	1 in 1694	1 in 1953	1 in 1745	1 in 1008
1891	1 in 1814	1 in 2040	1 in 1893	1 in 1053
1901	1 in 1897	1 in 2132	1 in 1694	1 in 1122

There has, therefore, been on the whole a steady decrease of those described as “deaf and dumb” in proportion to the population in Great Britain and Ireland. But in the census for 1901, in addition to the 15,246 returned as “deaf and dumb” in England and Wales, 18,507 were entered as being “deaf,” 2433 of whom were described as having been “deaf from childhood.”

Mr B. H. Payne, the principal of the Royal Cambrian Institution, Swansea, makes the following remarks upon these figures:—

“The natural conclusion, of course, is that there has been a large increase, relative as well as absolute, of the class in which we are interested, which we call the deaf, and which includes the deaf and dumb. Indeed, the number, large as it is, cannot be considered as complete, for the schedules did not require persons who were only deaf to state their infirmity, and, though many did so, it may be presumed that more did not.

“On the other hand, circumstances exist which may reasonably be held to modify the conclusion that there has been a large relative increase of the deaf. The spread of education, the development of local government, and an improved system of registration, may have had the effect of procuring fuller enumeration and more appropriate classification than heretofore, while 1368 persons described simply as dumb, and who therefore probably belong, not to the deaf, but to the feeble-minded and aphasic classes, are included in the ‘deaf and dumb’ total. It is also to be noted that some of those who described themselves as ‘deaf’ though not born so may have been educated in the ordinary way before they lost their hearing, and are therefore outside the sphere of the operation of schools for the deaf.

“In connexion with the census of 1891, it has been remarked in the report of the institution that no provision was made in the schedules for distinguishing the congenital from the non-congenital deaf, and that it was desirable to draw such a distinction. To ascertain the relative increase or decrease of one or the other section of the class would contribute to our knowledge of the incidence of known causes of deafness or to the confirmation or discovery of other causes, and so far indicate the appropriate measures of prevention, while such an inquiry as that recommended has, besides, a certain bearing upon educational views.

“The exact number of ‘deaf and dumb’ and ‘deaf’ children who are of school age cannot be ascertained from the census tables, which give the numbers in quinquennial age-groups, while the school age is seven to sixteen. It is a pity that in this respect the functions of the census department are not co-ordinated with those of the Board of Education.”

John Hitz, the superintendent of the Volta Bureau for the Increase of Knowledge Relating to the Deaf, Washington, D.C., U.S.A., gives the number of schools for deaf children, and pupils, in different countries in 1900 as follows:—

Africa.

Country.	Schools.	Teachers.	Pupils.
Algeria	1	3	37
Egypt	1	2	6
Cape Colony	4	9*	77
Natal	1	2	7
	7	16*	127

* Incomplete.

Asia.

Country.	Schools.	Teachers.	Pupils.
China	3	10	43
India	3	13	73
Japan	3	24	337
	9	47	453

Australasia.

Country.	Schools.	Teachers.	Pupils.
Australia	6	41	282
New Zealand	1	5	50

	7	46	332

EUROPE.

Country.	Schools.	Teachers.	Pupils.
Austria-Hungary	38	291	2440
Belgium	12	181	1265
Denmark	5	57	348
France	71	598	4098
Germany	99	798	6497
Great Britain	95	462	4222
Italy	47	234	2519
Luxemburg	1	3	22
Netherlands	3	74	473
Norway	5	54	309
Portugal	2	9	64
Rumania	1	3	46
Russia, Finland, Livonia	34	118	1719
Servia	2	2*	26*
Spain	11	60	462
Sweden	9	124	726
Switzerland	14	84	650
Turkey	1		
	450	3152	25,886

* Incomplete.

NORTH AMERICA.

Country.	Schools.	Teachers.	Pupils.
Canada	7	130	768
United States	126	1347	10,946
Mexico	1	13	46
Cuba	1		
	135	1490	11,760

SOUTH AMERICA.

Country.	Schools.	Teachers.	Pupils.
Argentine	4	18	133
Brazil	1	9	35
Chile	1	7	61
Uruguay	1		
	7	34	229

SUMMARY.

Country.	Schools.	Teachers.	Pupils.
Africa	7	16	127
Asia	9	47	453
Australia	7	46	332
Europe	450	3152	25,886
North America	135	1490	11,760
South America	7	34	229
	615	4785	38,787

These figures refer only to deaf children who are actually under instruction, not to the whole deaf population.

While it is gratifying to find that so much is being done in the way of educating this class of the community, the number of schools in most parts of the world is still lamentably inadequate. For instance, taking the school age as from seven to sixteen, which is now made compulsory by Act of Parliament in Great Britain, and assuming that 20% of the deaf population are of that age, as they are in England, there should be 40,000 deaf pupils under instruction in India alone, whereas there are but seventy-three. There are 200,000 deaf of all ages in India. And what an enormous total should be in schools in China instead of forty-three! The whole of the rest of Asia, with the exception of Japan, has apparently not a single school. There must be many thousands of thousands of deaf (hundreds of thousands, if not thousands of thousands of whom are of school age) in that continent, unless indeed they are destroyed, which is not impossible. What are we to say of Africa, where only 100 pupils are being taught; of South America, with its paltry 200, and Australia’s 300? To come to Europe itself, Russia should have many times more pupils than her 1700. Even in Great Britain the education of the deaf was not made compulsory till 1893, and there are many still evading the law and

growing up uneducated. Mr Payne of Swansea estimated (*Institution Report*, 1903-1904) from the 1901 census, that there must be approximately 204 deaf of school age in South Wales and Monmouthshire, while only 144 were accounted for in all the schools in that district according to Dr Hitz's statistics.

Dr Kerr Love (*Deaf Mutism*, p. 217) gives the following table, which shows the number of deaf people in proportion to the population in the countries named:—

Switzerland	1 in	408
Austria	”	765
Hungary	”	792
Sweden	”	977
Prussia	”	981
Finland	”	981
Canada	”	1003
Norway	”	1052
Germany (exclusive of Prussia)	”	1074
Portugal	”	1333
Ireland	”	1398*
India	”	1459
United States	”	1514
Denmark	”	1538
Greece	”	1548
France	”	1600
Italy	”	1862
Scotland	”	1885*
Cape Colony	”	1904
England	”	2043*
Spain	”	2178
Belgium	”	2247
Australasia	”	2692
Holland	”	2985
Ceylon	”	4328

* The figures for England, Scotland and Ireland, according to the 1901 census, are different and have been given above.

According to a tabular statement of British and Colonial schools, June 1899, the proportion of those born deaf to those who lost hearing after birth was, at that time and in those countries, 2126 to 1251, as far as returns had been made. Several schools had, however, failed to give statistics. These figures show a proportion of nearly 59% congenitally deaf persons to over 41% whose deafness is acquired. Professor Fay, whose monumental work, *Marriages of the Deaf in America*, deserves particular attention, mentions (p. 38) that of 23,931 persons who attended American schools for the deaf up to the year 1890, 9842, or 41%, were reported as congenitally deaf, and 14,089, or 59%, as adventitiously deaf,—figures which exactly reverse those just quoted. The classification of deafness acquired in infancy with congenital deafness by some other authorities (giving rise to the rather absurd term “toto-congenital” to describe the latter) is unscientific. There is reason for the opinion that the non-congenital, even when hearing has been lost in early infancy, acquire language better, and it is a mistake from any point of view to include them in the born deaf.

Other statistics vary very much as to the proportion of born deaf, some being as low as a quarter, and some as high as three-quarters, of the whole class. We can only say, speaking of both sides of the Atlantic, and counterbalancing one period with another, that the general average appears to be about 50% for each. Probably the percentage varies in different places for definite reasons, which we shall now briefly consider.

Causes of Deafness.—These may be considered in two divisions, pre-natal and post-natal.

1. *Pre-Natal.*—A small percentage of these is due, it seems, to malformation of some portion of the auditory apparatus. Another percentage is known to represent the children of the intermarriage of blood relations. Dr Kerr Love (*Deaf Mutism*, p. 117) gives statistics from thirteen British institutions which show that on a general average at least 8% of the congenitally deaf are the offspring of such marriages. Besides this, little is known. Beyond all doubt a much larger percentage of deaf children are the offspring of marriages in which one or both partners were born deaf than of ordinary marriages. But inquiries into such phenomena have generally been directed towards tracing deafness and not consanguinity, or at least the inquirer has rarely troubled to make sure whether the grandparents or great-grandparents on either side were relations or not. Such investigations rarely go beyond ascertaining if the parents were related to each other, though we have proof that a certain tendency towards any particular abnormality may not exhibit itself in every generation of the family in question. To give an illustration, suppose that G is a deaf man. Several inquirers may trace back to the preceding generation F, and to the grandparents E, and even to the great-grandparents D, in search of an ancestor who is deaf, and such they may discover in the third generation D. But probably not one of these several inquirers will ask G if any of his grandparents or great-grandparents married a cousin, for instance, though they may ask if his father did. To continue this hypothetical case, the investigators will again trace back along the family tree to generations C, B and A in search of an original *deaf* ancestor, on whose shoulders they seek to lay the blame of both D's and G's deafness. Not finding any such, they will again content themselves with asking if D's parents (generation C) were blood relations or not, and, receiving an answer in the negative, desist from further inquiry in this direction, assuming that D's deafness is the original cause of G's deafness. They do not, we fear, inquire if any grandparents or great-grandparents (hearing people) were related, with the same persistency as they ask if any were deaf. The search for deafness is pushed through several generations, the search for consanguinity is only extended to one generation. Perhaps if it were carried further, it would be discovered that A married his niece, and there lay the secret of the deafness in both D and G. In other words, the deafness in D is not the cause of that in G, but the deafness in both D and G are effects of the consanguineous marriage in A. All this is, however, merely by way of

suggestion. We submit that if deafness in one generation may be followed by deafness two or even three generations later, while the tendency to deafness exists, but does not appear, in the intermediate generations, it is only logical to inquire if deafness in the first discoverable instance in a family may not be caused by consanguinity, the effect of which is not seen for two or three generations in a similar manner. Moreover it is probable that consanguinity in parents or grandparents may often be denied. An exhaustive investigation along these lines is desirable, for we believe that congenital deafness would be proved to be due to consanguinity in hearing people, if the search were pushed far enough back and the truth were told, in a far greater percentage of cases than is now suspected. This is not disproved by quoting numbers of cases where no deafness follows consanguinity in any generation, for resulting weakness may be shown (where it exists) in many other ways than by deafness.

This theory receives support from the statistics quoted by Dr Kerr Love (*Deaf Mutism*, p. 132), where the percentage of defective children resulting from the consanguineous marriages of hearing people increases in almost exact proportion to the nearness of affinity of the parents. It is further borne out by statistics of the duchy of Nassau, and of Berlin, both quoted by Dr Kerr Love (pp. 119, 120). These show 1 deaf person in 1397 Roman Catholics, 1101 Evangelicals and 508 Jews in the former case, and 1 in 3000 Roman Catholics, 2000 Protestants and 400 Jews in the latter. When we are told that "Roman Catholics prohibit marriages between persons who are near blood relations, Protestants view such marriages as permissible, and Jews encourage intermarriage with blood relations," these figures become suggestive. We find the same greater tendency to deafness in thinly-populated and out-of-the-way districts and countries where, owing to the circle of acquaintances being limited, people are more likely to marry relations.

With regard to the question of marriages of the deaf, Professor Edward Allen Fay's work is so complete that the results of his six years' labour are particularly worthy of notice, for, as the introduction states, the book is a "collection of records of marriages of the deaf far larger than all previous collections put together," and it deals in detail with 4471 such marriages. The summary of statistics is as follows (*Marriages of the Deaf in America*, p. 134):—

Marriages of the Deaf.	Number of Marriages.		Number of Children.		Percentage.	
	Total.	Resulting in deaf offspring.	Total.	Deaf.	Marriages resulting in deaf offspring.	Deaf childre
One or both partners deaf	3078	300	6782	588	9.7	8
Both partners deaf	2377	220	5072	429	9.2	8
One partner deaf, the other hearing	599	75	1532	151	12.5	9
One or both partners congenitally deaf	1477	194	3401	413	13.1	12
One or both partners adventitiously deaf	2212	124	4701	199	5.6	4
Both partners congenitally deaf	335	83	779	202	24.7	25
One partner congenitally deaf, the other adventitiously deaf	814	66	1820	119	8.1	6
Both partners adventitiously deaf	845	30	1720	40	3.5	2
One partner congenitally deaf, the other hearing	191	28	528	63	14.6	11
One partner adventitiously deaf, the other hearing	310	10	713	16	3.2	2
Both partners had deaf relatives	437	103	1060	222	23.5	20
One partner had deaf relatives, the other had not	541	36	1210	78	6.6	6
Neither partner had deaf relatives	471	11	1044	13	2.3	1
Both partners congenitally deaf; both had deaf relatives	172	49	429	130	28.4	30
Both partners congenitally deaf; one had deaf relatives, the other had not	49	8	105	21	16.3	20
Both partners congenitally deaf; neither had deaf relatives	14	1	24	1	7.1	4
Both partners adventitiously deaf; both had deaf relatives	57	10	114	11	17.5	9
Both partners adventitiously deaf; one had deaf relatives, the other had not	167	7	357	10	4.1	2
Both partners adventitiously deaf; neither had deaf relatives	284	2	550	2	0.7	0
Partners consanguineous	31	14	100	30	45.1	30

One point deserves special attention in the above list. It is that where there are no deaf relatives (*i.e.* where there has not been a history of deafness in the family) only one child out of twenty-four is deaf, even when the parents were both born deaf themselves. Where there were deaf relatives already in the family on both sides, and the parents were born deaf, the percentage of deaf children is seven and a half times as great. This seems to show that there are causes of congenital deafness which are, comparatively speaking, unlikely to be transmitted to future generations, while other causes of congenital deafness are so liable to be perpetuated that one child in every three is deaf. We conjecture that one original cause of congenital deafness which reappears in a family is consanguinity—for instance, the intermarriage of first or second cousins (hearing people) in some previous generation. Out of the 2245 deaf persons who were born deaf, 269 had parents who were blood relations, according to Fay. And perhaps many more refrained from acknowledging the fact. Eleven had grandparents who were cousins. This theory calls for investigation, and while the marriage of deaf people is not encouraged, it is fair to ask those who so strenuously oppose such unions whether they may not be spending their energies on trying to check an effect instead of a cause, and if that cause may not really be consanguinity,—witness the percentage of deaf people among Roman Catholics, Protestants and Jews before noticed. On the principle that prevention is better than cure it is the intermarriage of cousins and other relations which should be discouraged. The marriage of deaf people is inadvisable where there has been deafness in the family in former generations, but the same warning applies to all the other members of that family, for the hearing members are as likely to transmit the defect of which deafness is a symptom as the deaf members are. We are more concerned to discover the primary cause of the defect, and take steps to prevent the latter from occurring at all. Those who have no dissuasions for hearing people, who might perhaps cause the misery, and only give counsel to those among the transmitters of it who happen to be deaf, are acting in a manner which is hardly logical.

2. *Post-Natal.*—We have collected and grouped the stated causes of deafness in those partners of the

marriages in America noticed by Fay. About a hundred and thirty did not mention how they lost hearing. Any errors in this calculation must be less than 1% at most, and can make no material difference. In some cases two or more diseases are given as the cause of deafness. In such cases where one is a very common cause of deafness, and the other is unusual, the former is credited with being the reason for the defect. Where both are common, we have divided the cases between them in a rough proportion.

Scarlet fever 973; scarlatina 3; scarlet rash 2	978
Spotted fever 260; meningitis 92; spinal meningitis 76; cerebro-spinal meningitis 70; spinal fever 28; spinal disease 8; congestion of spine 2	536
Brain fever 309; inflammation of brain 62; congestion of brain 30; disease in brain 3	404
Typhoid 127; “fever” (unspecified) 117; typhus 17; intermittent fever 14; bilious fever 11; other fevers 14	300
Gatherings, inflammations, in head; ulcers, disease, sores, risings, &c., all but 22 being explicitly stated to be in head or ears	276
“Sickness” 167; “illness” 49; “disease” 8; no definite specification 12	236
Measles	191
Colds 101; colds in head, &c. 35; catarrh 19; catarrhal fevers 10; chills, &c. 17	182
Whooping cough 77; diphtheria 34; lung fever, and various diseases of lungs and throat 60	171
Falls	143
Fits and convulsions 58; spasms 18; teething 16	92
Scrofula 35; mumps 25; swellings on neck 2	62
Many various and unusual causes	60
Smallpox 8; chickenpox 6, cholera, &c. 7; canker, &c. 11; erysipelas 13	45
Paralysis, &c. 12; nerve diseases 12; fright 8; palsy 3	35
Hydrocephalus 14; dropsy on brain or in head 17; dropsy 2	33
Various accidents, blows, kicks, &c.	31
Quinine 22; other medicines 7	29
Total	3804

We have counted a hundred and thirty of those who were returned as having lost hearing who were also stated to be the offspring of consanguineous marriages.

Dr Kerr Love (*Deaf Mutism*, p. 150) gives the following list compiled from the registers of British institutions:— 884

Scarlet fever	331
Miscellaneous causes	175
Teething, convulsions, &c.	171
Meningitis, brain fever, &c.	166
Measles	138
Falls and accidents	122
Enteric and other fevers	119
Disease, illness, &c.	37
Whooping cough	33
Suppurative ear diseases	18
Syphilis	2
	1312
Unknown causes	98

The same writer quotes Hartmann’s table, compiled in 1880 from continental statistics, as follows:—

Cerebral affections, inflammations, convulsions	644
Cerebro-spinal meningitis	295
Typhus	260
Scarlatina	205
Measles	84
Ear disease, proper	77
Lesions of the head	70
Other diseases	354
	1989

There appears to be no cure for deafness that is other than partial; but with the advance of science preventive treatment is expected to be efficacious in scarlet fever, measles, &c.

Condition of the Deaf.

1. *In Childhood.*—It is difficult to impress people with two facts in connexion with teaching language to the average child who was born deaf, or lost hearing in early infancy. One is the necessity of the undertaking,

and the other is that this necessity is not due to mental deficiency in the pupil. To the born deaf-mute in an English-speaking country English is a foreign language. His inability to speak is due to his never having heard that tongue which his mother uses. The same reason holds good for his entire ignorance of that language. The hearing child does not know a word of English when he is born, and never would learn it if taken away from where it is spoken. He learns English unconsciously by imitating what he hears. The deaf child never hears English, and so he never learns it till he goes to school. Here he has to start learning English—or whatever is the language of his native land—in the same way as a hearing boy learns a foreign language.

But another reason exists which renders his task much more difficult than that of a normal English schoolboy learning, say, German. The latter has two channels of information, the eye and the ear; the deaf boy has only one, the eye. The hearing boy learns German by what he hears of it in class as well as by reading it; the deaf boy can only learn by what he sees. It is as if you tried to fill two cisterns of the same capacity with two inlets to one and only one inlet to the other; supposing the inlets to be the same size, the former will fill twice as fast. So it is in the case of the hearing boy as compared with his deaf brother. The cerebral capacity and quality are the same, but in one case one of the avenues to the brain is closed, and consequently the development is less rapid. Moreover, the thoughts are precisely those which would be expected in people who form them only from what they see. We were often asked by our deaf playmates in our childhood such questions (in signs) as “What does the cat say?”—“The dog talks, does he not?”—“Is the rainbow very hot on the roof of that house?” They have often told us such things as that they used to think someone went to the end of the earth and climbed up the sky to light the stars, and to pour down rain through a sieve.

But there is yet a third disadvantage for the already handicapped deaf boy. He has no other language to build upon, while the other has his mother tongue with which to compare the foreign language he is learning. The latter already has a general idea of sentences and clauses, of tense and mood, of gender, number and case, of substantives, verbs and prepositions; and he knows that one language must form some sort of parallel to another. He is already prepared to find a subject, predicate and object, in the sentence of a foreign language, even when he knows not a word of any but his own mother tongue. If he is told that a certain word in German is an adjective, he understands what its function is, even when he has yet to learn the meaning of the word. All this goes for nothing in the case of the deaf pupil. The very elementary fact that certain words denote certain objects—that there is such a class of word as substantives—comes as a revelation to most deaf children. They have to begin at seven laboriously and artificially to learn what an ordinary baby has unconsciously and naturally discovered at the age of two. English, spoken, written, printed or finger-spelled, is no more natural, comprehensible or easy of acquirement to the deaf than is Chinese. The manual alphabet is simply one way of expressing the vernacular on the fingers; it is no more the deaf-mute’s “natural” language than speech or writing, and if he cannot express himself by the latter modes of communicating, he cannot by spelling on the fingers. The last is simply a case of *vicaria linguae manus*. None of these are languages in themselves; whether you use pen or type, hand or voice, you are but adopting one or other method of expressing one and the same tongue—English or whatever it may be, that of a “people of a strange speech and of a hard language, whose words they cannot understand.” The deaf child’s natural mode of communication—more natural to him than any verbal language is to hearing people—is the world-wide, natural language of signs.

2. *Natural Language of the Deaf.*—We have just called signs a natural language. While a purist might properly object to this adjective being applied to all signs, yet it is not an unfair term to use as regards this method of conversing as a whole, even in the United States, where signs, being to a great extent the French signs invented by de l’Epée, are more artificial than in England. The old story, by the way, of the pupil of de l’Epée failing to write more than “hand, breast,” as describing what an incredulous investigator did when he laid his hand on his breast, proves nothing. In all probability he had no idea that he was expected to describe an action, and thought that he was being asked the names of certain parts of the body. The hand was held out to him and he wrote “hand.” Then the breast was indicated by placing the hand on it, and he wrote “breast.” Moreover, the artificial element is much less pronounced than is supposed by most of those who are loudest in their condemnation of signs, there being almost invariably an obvious connexion between the sign and idea. These critics are generally people whose acquaintance with the subject is rather limited, and the thermometer of whose zeal in waging war against gestures generally falls in proportion as the photometer of their knowledge about them shows an increasing light. We may go still further and point out that to object to any sign on the ground of artificiality *per se*, is to strain at the gnat and to swallow the camel, for English itself is one of the most artificial languages in existence, and certainly is more open to such an objection than signs. If we apply the same test to English that is applied to signs by those who would rule out any which they suppose cannot come under the head of natural gesture or pantomime, what fraction of our so-called natural language should we have left? For a spoken word to be “natural” in this sense it must be onomatopoetic, and what infinitesimal percentage of English words are such? A foreigner, unacquainted with the language, could not glean the drift of a conversation in English, except perhaps a trifle from the tone of the voices and more from the natural signs used—the smiles and frowns, the expressions of the faces, the play of eyes, lips, hands and whole body. The only words he could possibly understand without such aids are some such onomatopoetic words as the cries of animals—“mew,” “chirrup,” &c., and a few more like “bang” or “swish.”

The reason why we insist emphatically upon the importance of teaching English in schools for the deaf in English-speaking countries, is, firstly, because that is the language which the pupil will be called upon to use in his intercourse with his fellow-men after he leaves school, and secondly, because, if his grasp of that tongue only be sufficient and his interest in books be properly aroused, he can go on educating himself in after-life by means of reading. Time tables are overcrowded with kindergarten, clay modelling, wood-carving, carpentry, and other things which are excellent in themselves. But there is not time for everything, and these are not as important in the case of the deaf pupil as language. Putting aside the question of religion and moral training, we consider the flooding of their minds with general knowledge, and the teaching of English to enable them to express their thoughts to their neighbours, to be of paramount importance, so paramount that all other branches of education in their turn pale into insignificance by comparison with these, while the question of methods of instruction should be subservient to these main ends. Too many make speech in itself

an end. This is a mistake. Speech is not in itself English; it is only one way of expressing that language. And we are little concerned to inquire by what means the deaf pupil expresses himself in English so long as he does so express himself, whether by speech or writing, or as he does so express himself, whether by speech or writing or finger-spelling—for if he can finger-spell he can write. It is not the mere fact that he can make certain sounds or write certain letters or form the alphabet on his hands that should signify. It is the actual language that he uses, whatever be the means, and the thoughts that are enshrined in the language, that should be our criterion when judging of his education.

The importance of English is insisted upon because to place the deaf child in touch with his English-speaking fellow-men we must teach him their language, and also because he can thereby educate himself by means of books if, and when, he has a sufficient command of that language. The reason is not because the vernacular is actually superior to signs as a means of conversation. The sign language is quite equal to the vernacular as a means of expression. The former is as much our mother tongue, if we may say so, as the latter; we used one language as soon as the other, in our earliest infancy; and, after a lifelong experience of both, we affirm that signs are a more beautiful language than English, and provide possibilities of a wealth of expression which English does not possess, and which probably no other language possesses.

That others whose knowledge of signs is lifelong hold similar opinions is shown by the following extract from *The Deaf and their Possibilities*, by Dr Gallaudet:—

> "Thinking that the question may arise in the minds of some, 'Does the sign language give the deaf, when used in public addresses, all that speech affords to the hearing?' I will say that my experience and observation lead me to answer with a decided affirmative. On occasions almost without number it has been my privilege to interpret, through signs to the deaf, addresses given in speech; I have addressed hundreds of assemblages of deaf persons in the college, in schools I have visited, and elsewhere, using signs for the original expression of thought; I have seen many more lectures and public debates given originally in signs; I have seen conventions of deaf-mutes in which no word was spoken, and yet all the forms of parliamentary proceedings were observed, and the most earnest, and even excited, discussions were carried on. I have seen the ordinances of religion administered, and the full service of the Church rendered in signs; and all this with the assurance growing out of my complete understanding of the language—a knowledge which dates from my earliest childhood—that for all the purposes enumerated gestural expression is in no respect inferior, and is in many respects superior, to oral, verbal utterance as a means of communicating ideas."

The following is an analysis of the sign language given by Mr Payne of the Swansea Institution, together with his explanatory notes:—

"*Analysis of the Sign Language.*

I. Facial expression.

II. Gesture

Conventional especially in shortened form.

1. Sympathetic
2. Representative (= Natural signs)
3. Systematic (*a*) Arbitrary signs
   (*b*) Grammatical signs

III. Mimic action.

IV. Pantomime.

"*Observations.*—People speak of 'manual signs.' Of course there are signs which are made with the hands only, as there are others which are labial, &c. But the sign language is comprehensive, and at times the whole frame is engaged in its use. A late American teacher could and did 'sign' a story to his pupils with his hands behind him. Facial expression plays an important part in the language. Sympathetic gestures are individualistic and spontaneous, and are sometimes unconsciously made. The speaker, feeling that words are inadequate, reinforces them with gesture. Arbitrary signs are, *e.g.*, drumming with three separated fingers on the chin for 'uncle.' Grammatical signs are those which are used for inflections, parts of speech, or letters as in the manual alphabet, and some numerical signs, though other numerals may be classed as natural; also signs for sounds, and even labial signs. Signs, whether natural or arbitrary, which gain acceptance, especially if they are shortened, are 'conventional.' 'Mimic action' refers, *e.g.*, to the sign for sawing, the side of one hand being passed to and fro over the side or back of the other.'Pantomime' means, *e.g.*, when the signer pretends to hang up his hat and coat, roll up his sleeves, kneel on his board, guide the saw with his thumb, saw through, wipe his forehead, &c."

Illustrations of one style of numerical signs are given below.

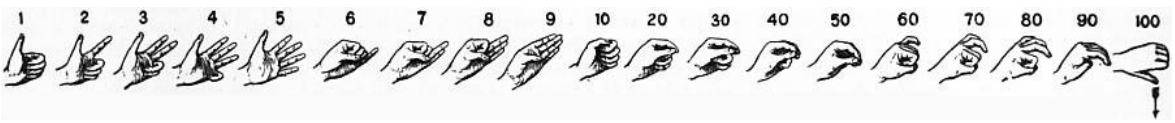

FIG. 1.

Units are signified with the palm turned inwards; tens with the palm turned outwards; hundreds with the fingers downwards; thousands with the left hand to the right shoulder; millions with the hand near the forehead. For 12, sign 10 outwards and 2 inwards, and so on up to 19. 21 = 2 outwards, 1 inwards, and so on up to 30. 146 = 1 downwards, 4 outwards, 6 inwards. 207,837 = 2 downwards, 7 inwards (both at shoulder), 8 downwards, 3 outwards, 7 inwards. 599,126,345 = 5 downwards, 9 outwards, 9 inwards (all near forehead); 1 downwards, 2 outwards, 6 inwards (all at shoulder); 3 downwards, 4 outwards, 5 inwards (in front of chest).

Only the third, and a few of the second, subdivision of the second section of the above classes of signs can

be excluded when talking of signs as being the deaf-mute's natural language. In fact we hesitate to call representative gesture—*e.g.* the horns and action of milking for "cow," the smelling at something grasped in the hand for "flower," &c.—conventional at all, except when shortened as the usual sign for "cat" is, for instance, from the sign for whiskers *plus* stroking the fur on back and tail *plus* the action of a cat licking its paw and washing its face, to the sign for whiskers only.

The deaf child expresses himself in the sign language of his own accord. The supposition that in manual or combined schools generally they "teach them signs" is incorrect, except that perhaps occasionally a few pupils may be drilled and their signs polished for a dramatic rendering of a poem at a prize distribution or public meeting, which is no more "teaching them signs" than training hearing children to recite the same poem orally and polishing their rendering of it is teaching them English. If the deaf boy meets with some one who will use gesture to him, a new sign will be invented as occasion requires by one or other to express a new idea, and if it be a good one is tacitly adopted to express that idea, and so an entire language is built up. It follows that in different localities signs will differ to a great extent, but one who is accustomed to signing can readily see the connexion and understand what is meant even when the signs are partly novel to him. We are sometimes asked if we can make a deaf child understand abstract ideas by this language. Our answer is that we can, if a hearing child of no greater age and intelligence can understand the same ideas in English. Signs are particularly the best means of conveying religious truths to the deaf. If you wish to appeal to him, to impress him, to reach his heart and his sympathies (and, incidentally, to offer the best possible substitute for music), use his own eloquent language of signs. We have conversed by signs with deaf people from all parts of the British Isles, from France, Norway and Sweden, Poland, Finland, Italy, Russia, Turkey, the United States, and found that they are indeed a world-wide means of communication, even when we wandered on to most unusual and abstract subjects. Deaf people in America converse with Red Indians with ease thereby, which shows how natural the generality of even de l'Epée signs are. The sign language is everybody's natural language, not only the deaf-mute's.

> Addison (*Deaf Mutism*, p. 283) quotes John Bulwer as follows:—"What though you (the deaf and dumb) cannot express your minds in those verbal contrivances of man's invention: yet you want not speech who have your whole body for a tongue, having a language which is more natural and significant, which is common to you with us, to wit, gesture, the general and universal language of human nature." The same writer says further on (p. 297): "The same process of growth goes on alike with the signs of the deaf and dumb as with the spoken words of the hearing. Arnold, than whom no stronger advocate of the oral method exists, recognizes this in his comment on this principle of the German school, for he writes: 'It is much to be regretted that teachers should indulge in unqualified assertions of the impossibility of deaf-mutes attaining to clear conceptions and abstract thinking by signs or mimic gestures. Facts are against them.' Again, Graham Bell, who is generally considered an opponent of the sign system, says: 'I think that if we have the mental condition of the child alone in view without reference to language, no language will reach the mind like the language of signs; it is the method of reaching the mind of the deaf child.'"
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> The opinions of the deaf themselves, from all parts of the world, are practically unanimous on this question. In the words of Dr Smith, president of the World's Congress of the Deaf held at St Louis, Missouri, in 1904, under the auspices of the National Association of the Deaf, U.S.A., "the educated deaf have a right to be heard in these matters, and they must and shall be heard." A portion may be quoted of the resolutions passed at that congress of 570 of the best-informed deaf the world has ever seen, at least scores, if not hundreds, of them holding degrees, and being as well educated as the vast majority of teachers of the deaf in England: "Resolved, that the oral method, which withholds from the congenitally and quasi-congenitally deaf the use of the language of signs outside the schoolroom, robs the children of their birthright; that those champions of the oral method, who have been carrying on a warfare, both overt and covert, against the use of the language of signs by the adult deaf, are not friends of the deaf; and that, in our opinion, it is the duty of every teacher of the deaf, no matter what method he or she uses, to have a working command of the sign language."

It is often urged as an objection to the use of signs that those who use them think in them, and that their English (or other vernacular language) suffers in consequence. There is, however, no more objection to thinking in signs than to thinking in any other language, and as to the second objection, facts are against such a statement. The best-educated deaf in the world, as a class, are in America, and the American deaf sign almost to a man. It is true that at first a beginner in school may, when at a loss how to express himself in words, render his thoughts in sign-English, if we may use the expression, just as a schoolboy will sometimes put Latin words in the English order. That is, the deaf pupil puts the word in the natural order of the signs, which is really the logical order, and is much nearer the Latin sequence of words than the English. But, firstly, if he had always been forbidden to use signs he would not express himself in English any better in that particular instance; he would simply not attempt to express himself at all,—so he loses nothing, at least; and secondly, it is perfectly easy to teach him in a very short time that each language has its own idiom and that the thought is expressed in a different order in each.

Of the deaf child's moral condition nothing more need be said than that it is at first exactly that of his hearing brother, and his development therein depends entirely upon whether he is trained to the same degree. The need of this is great. He is quite as capable of religious and moral instruction, and benefits as much by what he receives of it. Happiness is a noticeable feature of the character of the deaf when they are allowed to mix with each other. The charge of bad temper can usually be sustained only when the fault is on the side of those with whom they live. For instance, the latter often talk in the presence of the deaf person without saying a word to him, and if he then shows irritation, which is not often in any case, it is no more to be wondered at than if a hearing person resents whispering or other secret communication in his presence.

3. *Social Status, &c.*—From the 1901 census "Summary Tables" we gather the following facts concerning the occupations of the deaf, aged ten and upwards, in England and Wales. About half of the total number, taking males and females together (13,450), are engaged in occupations—6665. The rest—6785—are retired or unoccupied. Of the former, the following table given below shows the distribution:—

In general or local government work (clerks, messengers, &c.)	11
In professional occupations and subordinate services	87

In domestic offices or services	788
In commercial occupations	12
In work connected with conveyance of men, goods or messages	144
In agriculture	568
In fishing	3
In and about mines and quarries, &c.	151
In work connected with metals, machines, implements, &c.	503
In work connected with precious metals, jewels, games, &c.	46
In building and works of construction	485
In work connected with wood, furniture, fittings and decorations	470
In work connected with brick, cement, pottery and glass	153
In work connected with chemicals, oil, soap, &c.	46
In work connected with skins, hair and feathers	137
In work connected with paper, prints, books, &c.	238
In work connected with textile fabrics	407
In work connected with dress	1829
In work connected with food, tobacco, drink and lodging	194
In work connected with gas, water and electric supply, and sanitary service	22
Other general and undefined workers and dealers	371
	——
Total	6665

Among those in professional occupations are a clergyman, five law clerks, ten schoolmasters, teachers, &c., thirty-seven painters, engravers and sculptors, and seven photographers. Of those not engaged in occupations, 235 have retired from business, and 245 are living on their own means. Probably a very large number of the remainder were out of work or engaged in odd jobs at the time of the census; it would certainly be incorrect to take the words “Without specified occupations or unoccupied” to mean that those classified as such were permanently unable to support themselves.

The commonest occupations of men are bootmaking (555), tailoring (429), farm-labouring (287), general labouring (257), carpentry (195), cabinet-making (142), painting, decorating and glazing (95), French-polishing (88), harness-making, &c. (80).

The commonest occupations of women are dressmaking (484), domestic service (367), laundry and washing service (230), tailoring (170), shirtmaking, &c. (81), charing (79).

In Munich there are about sixty deaf artists, especially painters and sculptors. In Germany and Austria generally, deaf lithographers, xylographers and photographers are well employed, as are bookbinders in Leipzig in particular, and labourers in the provinces.

In France there are several deaf writers, journalists, &c., two principals of schools, an architect, a score or so of painters, several of whom are ladies, nine sculptors, and a few engravers, photographers, proof-readers, &c.

Italy boasts deaf wood-carvers, sculptors, painters, and architects graduating from the universities and academies of fine arts with prizes and medals; also type-setters, pressmen, carvers of coral, ivory and precious stones.

Two gentlemen in the office of the Norwegian government are deaf, as are four in the engraving department of the land survey; one is a master-lithographer, another a master-printer, a third a civil engineer, and the rest are engaged in the usual trades, as are those in Sweden.

The deaf form societies of their own to guard their interests, for social intercourse and other purposes. In England there is the British Deaf and Dumb Association; in America the National Association of the Deaf and many lesser societies; Germany has no fewer than 150 such associations, some of which are athletic clubs, benefit societies, dramatic clubs, and so forth. The central Federation is the largest German association. France has the National Union of Deaf-Mutes and others, many being benefit clubs. Italy has some societies; Sweden has eight.

In the United States there are no fewer than fifty-three publications devoted to the interests of the deaf, most of them being school magazines published in the institutions themselves. Great Britain and Ireland have six, four of them being school magazines. France, Germany, Sweden, Hungary have several, and Finland, Russia, Norway, Denmark and Austria are represented. Canada has three.

There are many Church and other missions to the deaf in England and abroad, which are much needed owing to the difficulty the average deaf person has in understanding the archaic language of both Bible and Prayer-book. Until they have this explained to them it is useless to place these books in their hands, and even where they are well-educated and can follow the services, they fail to get the sermon. Chaplains and missioners engage in all branches of pastoral work among them, and also try to find them employment, interpret for them where necessary, and interview people on their behalf.

The difficulty of obtaining employment for the deaf has been increased in Great Britain by the Employers’ Liability and Workmen’s Compensation Acts, for masters are afraid—needlessly, as facts show—to employ them, under the impression that they are more liable to accidents owing to their affliction.

The new After-Care Committees of the London County Council are a late confession of a need which other bodies have long endeavoured to supply. Education should be a development of the whole nature of the child. The board of education in England provides for intellectual, industrial and physical training, but does not take cognizance of those parts of education which are far more important—the social, moral and spiritual. Some teachers, both oral and manual, do an incalculable amount of good at the cost of great self-sacrifice and in face of much discouragement. They deserve the highest praise for so doing, and such work needs to be carried on after their pupils leave school.

History.[2]—"Who hath made man's mouth? or who maketh a man dumb, or deaf, or seeing, or blind? Is it not I the Lord?" (Ex. iv. 11). Such is the first known reference to the deaf. But the significance of this statement was not realized by the ancients, who mercilessly destroyed all the defective, the deaf among the rest. Greek and Roman custom demanded their death, and they were thrown into the river, or otherwise killed, without causing any comment but that so many encumbrances had been removed. They were regarded as being on a mental level with idiots and utterly incapable of helping themselves. In later times Roman law forbade those who were deaf and dumb from birth to make a will or bequest, placing them under the care of guardians who were responsible for them to the state; though if a deaf person had lost hearing after having been educated, and could either speak or write, he retained his rights. Herodotus refers to a deaf son of Croesus, whom he declares to have suddenly recovered his speech upon seeing his father about to be killed. Gellius makes a similar statement with reference to a certain athlete. Hippocrates was in advance of Aristotle when he realized that deaf-mutes did not speak simply because they did not know how to; for the last-named seems to have considered that some defect of the intellect was the cause of their inability to utter articulate sounds. Pliny the elder and Messalla Corvinus mention deaf-mutes who could paint.

The true mental condition of the deaf was realized, however, by few, if any, before the time of Christ. He, as He opened the ears of the deaf man and loosened his tongue, talked to him in his own language, the language of signs.

St Augustine erred amazingly when he declared that the deaf could have no faith, since "faith comes by hearing only." The Talmud, on the other hand, recognized that they could be taught, and were therefore not idiotic.

It is, however, with those who attempted to educate the deaf that we are here chiefly concerned. The first to call for notice is St John of Beverley. The Venerable Bede tells how this bishop made a mute speak and was credited with having performed a miracle in so doing. Probably it was nothing more than the first attempt to teach by the oral method, and the greatest credit is due to him for being so far in advance of his times as to try to instruct his pupil at all. Bede himself invented a system of counting on the hands; and also a "manual speech," as he called it,—using his numerals to indicate the number of the letter of the alphabet; thus, the sign for "seven" would also signify the letter "g," and so forth. But we do not know that he intended this alphabet for the use of the deaf.

It is not until the 16th century that we hear much of anybody else who was interested in the deaf, but at this date we find Girolamo Cardan stating that they can be instructed by writing, after they have been shown the signification of words, since their mental power is unaffected by their inability to hear.

Pedro Ponce de Leon (*c.* 1520-1584), a Spanish Benedictine monk, is more worthy of notice, as he, to use his own words, taught the deaf "to speak, read, write, reckon, pray, serve at the altar, know Christian doctrine, and confess with a loud voice." Some he taught languages and science. That he was successful was proved by other witness than his own, for Panduro, Valles and de Morales all give details of his work, the last-named giving an account by one of Ponce's pupils of his education. De Morales says further that Ponce de Leon addressed his scholars either by signs or writing, and that the reply came by speech. It appears that this master committed his methods to writing. Though this work is lost it is probable that his system was put into practice by Juan Pablo Bonet. This Spaniard successfully instructed a brother of his master the constable of Castile, who had lost hearing at the age of two. His method corresponded in a great measure to that which is now called the combined system, for, in the work which he wrote, he shows how the deaf can be taught to speak by reducing the letters to their phonetic value, and also urges that finger-spelling and writing should be used. The connexion between all three, he goes on to say, should be shown the pupils, but the manual alphabet should be mastered first. Nouns he taught by pointing to the objects they represented; verbs he expressed by pantomime; while the value of prepositions, adverbs and interjections, as well as the tenses of verbs, he believed could be learnt by repeated use. The pupil should be educated by interrogation, conversation, and carefully graduated reading. The success of Bonet's endeavours are borne witness to by Sir Kenelm Digby, who met the teacher at Madrid.

Bonifacio's work on signs, in which he uses every part of the body for conversational purposes, may be mentioned before passing to John Bulwer, the first Englishman to treat of teaching the deaf. In his three works, *Philocophus*, *Chirologia* and *Chironomia*, he enlarges upon Sir Kenelm Digby's account, and argues about the possibility of teaching the deaf by speech. But he seems to have had no practical experience of the art.

Dr John Wallis is more important, though it has been disputed whether he was not indebted to his predecessors for some ideas. He taught by writing and articulation. He took the trouble to classify to a certain extent the various sounds, dividing both vowels and "open" consonants into gutturals, palatals and labials. The "closed" consonants he subdivided into mutes, semi-mutes and semi-vowels. Language, Wallis maintained, should be taught when the pupil had first learned to write, and the written characters should be associated with some sort of manual alphabet. Names of things should be given first, and then the parts of those things, *e.g.* "body" first, and then, under that, "head," "arm," "foot," &c. Then the singular and plural should be given, then possessives and possessive pronouns, followed by particles, other pronouns and adjectives. These should be followed by the copulative verb; after which should come the intransitive verb and its nominative in the different tenses, and the transitive with its object in the same way. Lastly, prepositions and conjunctions should be taught. All this, Wallis held, ought to be done by writing as well as signing, for he did not lose sight of the fact that "we must learn the pupil's language in order to teach him ours."

Dr William Holder, who read an essay before the Royal Society in 1668-1669 on the "Elements of Speech," added an appendix concerning the deaf and dumb. He describes the organs of speech and their positions in articulation, suggesting teaching the pupil the sounds in order of simplicity, though he held that he must learn to write first. Afterwards the pupil must associate the letters with a manual alphabet. Holder notices that dumbness is due to the want of hearing, and therefore speech can be acquired through watching the lips, though he admits the task is a laborious one. He also urges the teacher to be patient and to make the

work as interesting to the pupil as possible. Command of language, he maintains, will enable the deaf person to read a sentence from the lips if he gets most of the words; for he will be able to supply those he did not see, from his knowledge of English.

Johan Baptist van Helmont treated of the work of the vocal organs. Amman says that Van Helmont had discovered a manual alphabet and used it to instruct the deaf, but had not attained very good results.

George Sibscota published a work in 1670 called the *Deaf and Dumb Man's Discourse*, in which he contradicts Aristotle's opinion that people are dumb because of defects in the vocal organs; for they are, he believed, dumb because never taught to speak. They can gain knowledge by sight, he maintained; can write, converse by signs, speak and lip-read. Ramirez de Carrion also taught the deaf to speak and write, as did P. Lana Terzi.

About George Dalgarno more is known. He wrote, in 1680, his *Didascalocophus*, or *Deaf-Mute's Preceptor*, in which he makes the mistake of saying that the deaf have the advantage over the blind in opportunities for learning language. The deaf can, in his opinion, be taught to speak, and also to read the lips if the letters are very distinct. They ought to read, write and spell on the fingers constantly, but use no signs. Substantives are to be taught by associating them with the things they represent; then adjectives should be joined to them. Verbs should be taught by suiting the action to the words, and associating the pronouns with them. Other parts of speech should be given as opportunities of explaining them present themselves. Dalgarno invented an alphabet, the letters being on the joints of the fingers and palm of the left hand.

John Conrad Amman published his *Dissertatio de Loquela* in 1700. In the first chapter he treats, among other things, of the nature of the breath and voice and the organs of speech. In the second chapter he classifies sounds into vowels, semi-vowels and consonants, and a detailed description of each sound is given. The third chapter is devoted to showing how to produce and control the voice, to utter each sound from writing or from the lips, and to combine them into syllables and words. It was only after the pupil had attained to considerable success in articulation and lip-reading that Amman taught the meaning of words and language; but the name of this teacher will long stand as that of one of the most successful the world has known.

Passing over Camerarius, Schott, Kerger (who began teaching language sooner than Amman did, and depended more on writing and signs), Raphel (who instructed three deaf daughters), Lasius, Arnoldi, Lucas, Vanin, de Fay (himself deaf) and many others, we come to Giacobbo Rodriguez Pereira, the pioneer of deaf-mute education in France, if we except de Fay. Beginning his experience by instructing his deaf sister, he soon attained to considerable success with two other pupils; his chief aim being, as he said, to make them comprehend the meaning of, and express their thoughts in, language. A commission of the French Academy of Sciences, before whom he appeared, testified to the genuineness of his achievements, noticing that he wrote and signed to his pupils, and stating that he hoped to proceed to the instruction of lip-reading. Pereira soon after came under the notice of the duc de Chaulnes, whose deaf godson, Saboureaux de Fontenay, became his pupil; and in five years this boy was well able to speak and read the lips. Pereira had several other pupils. Probably kindness and affection were two of the secrets of his success, for the love his scholars showed for him was unbounded. His method is only partly known, but he used a manual alphabet which indicated the pronunciation of the letters and some combinations. He used reading and writing; but signs were only called to his aid when absolutely necessary. Language he taught by founding it on action where possible, abstract ideas being gradually developed in later stages of the education.

We now come to the abbé de l'Epée (*q.v.*). The all-important features in this teacher's character and method were his intense devotion to his scholars and their class, and the fact that he lived among them and talked to them as one of themselves. Meeting with two girls who were deaf, he started upon the task of instructing them, and soon had a school of sixty pupils, supported entirely by himself. He spared himself no expense and no trouble in doing his utmost to benefit the deaf, learning Spanish for the sole purpose of reading Bonet's work, and making this book and Amman's *Dissertatio de Loquela* his guiding lights. But de l'Epée was the first to attach great importance to signs; and he used them, along with writing, until the pupil had some knowledge of language before he passed on to articulation and lip-reading. To the latter method, however, he never paid as much attention as he did to instructing by signs and writing, and finally he abandoned it altogether through lack of time and means. He laboured long on a dictionary of signs, but never completed it. He was attacked by Pereira, who condemned his method as being detrimental, and this was the beginning of the disputes as to the merits of the different methods which have lasted to the present day; but whatever opinions we may hold as to the best means of instructing the deaf we cannot but admire the devoted teacher who spent his life and his all in benefiting this class of the community.

Samuel Heinicke first began his work in 1754 at Dresden, but in 1778 he removed to Leipzig and started on the instruction of nine pupils. His methods he kept secret; but we know that he taught orally, using signs only when he considered them helpful, and spelling only to combine ideas. He wrote two books and several articles on the subject of educating the deaf, but it is from Walther and Fornari that we learn most about his system. At first Heinicke laid stress on written language, starting with the concrete and going on to the abstract; and he only passed to oral instruction when the pupils could express themselves in fairly correct language. Subsequently, however, he expressed the opinion that speech should be the sole method of instruction, and, strange to say, that by speech alone could thoughts be fully expressed.

Henry Baker became tutor to a deaf girl in 1720, and his success led to the establishment of a private school in London. He also kept his system a secret, but recently his work on lessons for the deaf was discovered, from which we gather that he adopted writing, drawing, speech and lip-reading as his course of instruction. The point to notice is that after the primary stages Baker turned events of every-day life to use in his teaching. His pupils went about with him, and he taught by conversation upon what they saw in the streets,—an excellent method; but it is a pity that such a good teacher had not the philanthropy to make his methods known and to give the poorer deaf the benefit of them, as de l'Epée did.

A school was established in Edinburgh in 1760 by Thomas Braidwood, who taught by the oral method. He

taught the sounds first, then syllables, and finally words, teaching their meaning. In 1783 Braidwood came to Hackney, whence he moved to Old Kent Road, and in 1809 there were seventy pupils in what was lately the Old Kent Road Institution. Braidwood's method was practically a development of Wallis's. We must regard him as the founder of the first public school for the deaf in England.

It was only at the beginning of the 19th century that a brighter day dawned on the deaf as a class. With the sole exception of de l'Epée no teacher had yet undertaken the instruction of a deaf child who could not pay for it. Now things began to be different. Institutions were founded, and their doors were opened to nearly all.

Dr Watson, the first principal of the Old Kent Road "Asylum," taught by articulation and lip-reading, reading and writing, explaining by signs to some extent, but using pictures much more, according to Addison, and composing a book of these for the use of his pupils. From Addison (*Deaf Mutism*, pp. 248 ff.) we learn what developments followed. In Vienna, Prague and Berlin, schools had been founded in rapid succession before the 19th century dawned, and in 1810 the Edinburgh institution opened its doors. Nine years later the 889
Glasgow school was established and, under the able guidance of Mr Duncan Anderson (after several other headmasters had been tried) from 1831, taught pupils whose grasp of English was equal to that of the very best educated deaf in England to-day, as has been proved by conversation with the survivors. Mr Anderson's great aim was to teach his pupils language, and we might look almost in vain for a teacher in England to succeed as well with a whole class in the beginning of the 20th century as he did in the middle of the 19th. He wrote a dictionary, used pictures and signs to explain English, and apparently paid little or no attention to most of the numerous subjects attempted to-day in schools for the deaf, which, while excellent in themselves, generally exclude what is far more important from the curriculum.

Addison further mentions Mr Baker of Doncaster, a contemporary of Anderson, as having compiled many lesson books for deaf children which came to be used in ordinary schools also, and Mr Scott of Exeter as having, together with Baker, "exercised a profound influence on the course of deaf-mute education in this country." "Written language," explained by signs where necessary, was the watchword of these teachers.

Moritz Hill is credited with being principally responsible for having evolved the German, or "pure," oral method out of the experimental stage to that at which it has arrived at the present day. Arnold of Riehen is also honourably mentioned.

The great "oral revival" now swept all before it. The German method was enthusiastically welcomed in all parts of Europe, and at the Milan conference in 1880 was almost unanimously adopted by teachers from all countries. Those in high places countenanced it; educational authorities awoke to the fact that the deaf needed special teaching, and came to the conclusion that the "pure" oral method was the panacea that would restore all the deaf to a complete equality with the hearing in any conversation upon any subject that might be broached; many governments suddenly took the deaf under the shelter of their own ample wings, and the "bottomless pocket of the ratepayer," instead of the purse of the charitable, became in many cases the fount of supply for what has been a costly and by no means entirely satisfactory experiment in the history of their education. The "pure" oral method has had a long and unique trial in England in circumstances which other methods have never enjoyed.

Meanwhile in the United States Dr Thomas Hopkins Gallaudet was elected in 1815 to go to Europe to inquire into the methods of educating the deaf in vogue there. This was at a meeting held in the house of a physician named Cogswell, in Hartford, Connecticut, and was the result of the latter's discovery that eighty-four persons in the state besides his own little girl were deaf. Henry Winter Syle, himself deaf, tells how "four months were spent in learning that the doors of the British schools were 'barred with gold, and opened but to golden keys,'" and how, disappointed in England, Gallaudet met with a ready response to his inquiries in Paris. With Laurent Clerc, a deaf teacher, he returned to the United States in 1816, and the "Connecticut Asylum" was founded a year after with seven pupils. The name was changed to "The American Asylum" later, when it was enlarged. This was followed by the Pennsylvania, New York and Kentucky institutions, with the second of which the Peet family were connected. Dr Gallaudet married one of his deaf pupils, Sophia Fowler, and, after a very happy married life, Mrs Gallaudet accompanied her youngest son, Edward Miner Gallaudet, to the Columbia institution for the Deaf and Dumb, Washington, D.C., founded in 1857 by Congress and largely supported by Amos Kendall, and to the National Deaf Mute College, which was founded in 1864, was renamed the Gallaudet College, in honour of Dr T. H. Gallaudet, in 1893, and with the Kendall School (secondary), now forms the Columbia Institution. This college is supported by Congress.

> The following account of the work done at the National Deaf-Mute College at Washington is worth attention, as the results are unique, and are often strangely ignored.
>
> Here is a statement of the course for the B.A. degree:—
>
> First year: Algebra, grammar, punctuation, history of England, composition, Latin grammar, Caesar.
>
> Second year: Algebra (from quadratics), geometry, composition, Caesar (Gallic War), Cicero (Orations), Allen and Greenough's *Latin Grammar*, Myer's *General History*, Goodwin's *Greek Grammar* (optional), Xenophon's *Anabasis* (optional).
>
> Third year: Olney's or Loomis's *Plane and Spherical Trigonometry*, Loomis's *Analytical Geometry* (optional), Orton's *Zoology*, Gray's *Botany*, Remsen's *Chemistry*, laboratory practice, Virgil's *Aeneid*, Homer's *Iliad* (optional), Meiklejohn's *History of English Literature and Language* (two books), Maertz's *English Literature*, Hadley's *History*, original composition.
>
> Fourth year: Loomis's *Calculus* (optional), Dana's *Mechanics*, Gage's *Natural Philosophy*, Young's *Astronomy*, laboratory practice, qualitative analysis, Steel's Hygienic *Physiology*, Edgren's *French Grammar*, Super's *French Reader, Demosthenes on the Crown* (optional), Hart's *Composition and Rhetoric*, original composition, Hill's-Jevon's *Elementary Logic*.
>
> Fifth year: Arnold's *Manual of English Literature*, Maertz's *English Literature*, original composition, Guizot's *History of Civilization*, Sheldon's *German Grammar*, Joynes's *German Reader*, LeConte's *Geology*, Guyot's *Earth and Man*, Hill's *Elements of Psychology*, Haven's *Moral Philosophy*, Butler's *Analogy*, Bascom's

Elements of Beauty, Perry's *Political Economy*, Gallaudet's *International Law*.

Even in 1893 we were told that of the graduates of the college "fifty-seven have been engaged in teaching, four have entered the ministry; three have become editors and publishers of newspapers; three others have taken positions connected with journalism; fifteen have entered the civil service of the government,—one of these, who had risen rapidly to a high and responsible position, resigned to enter upon the practice of law in patent cases, in Cincinnati and Chicago, and has been admitted to practise in the Supreme Court of the United States; one is the official botanist of a state, who has correspondents in several countries of Europe who have repeatedly purchased his collections, and he has written papers upon seed tests and related subjects which have been published and circulated by the agricultural department; one, while filling a position as instructor in a western institution, has rendered important service to the coast survey as a microscopist, and one is engaged as an engraver in the chief office of the survey; of three who became draughtsmen in architects' offices, one is in successful practice as an architect on his own account, which is also true of another, who completed his preparation by a course of study in Europe; one has been repeatedly elected recorder of deeds in a southern city, and two others are recorders' clerks in the west; one was elected and still sits as a city councilman; another has been elected city treasurer and is at present cashier of a national bank; one has become eminent as a practical chemist and assayer; two are members of the faculty of the college, and two others are rendering valuable service as instructors therein; some have gone into mercantile and other offices; some have undertaken business on their own account; while not a few have chosen agricultural and mechanical pursuits, in which the advantages of thorough mental training will give them a superiority over those not so well educated. Of those alluded to as having engaged in teaching, one has been the principal of a flourishing institution in Pennsylvania; one is now in his second year as principal of the Ohio institution; one has been at the head of a day school in Cincinnati, and later of the Colorado institution; a third has had charge of the Oregon institution; a fourth is at the head of a day school in St Louis; three others have respectively founded and are now at the head of schools in New Mexico, North Dakota, and Evansville, Indiana, and others have done pioneer work in establishing schools in Florida and in Utah."

Later years would unfold a similar tale of subsequent students; in 1907 there were 134 in the college and 59 in the Kendall School.

There is a normal department attached to the college, to which are admitted six hearing young men and women for one year who are recommended as being anxious to study methods of teaching the deaf and likely to profit thereby. Their course of study for 1898-1899 included careful training in the oral method, instruction in Bell's *Visible Speech*, instruction in the anatomy of the vocal organs, lectures on sound, observation of methods, oral and manual, in Kendall School, lectures on various subjects connected with the deaf and their education, lectures on pedagogy, lessons in the language of signs, practical work with classes in Kendall School under the direction of the teachers, correction of essays of the introductory class, &c. But the greatest advantage of the year's course is that the half-dozen hearing students live in the college, have their meals with the hundred deaf, and mix with them all day long—if they wish it—in social intercourse and recreation. We are very far indeed from saying that one such year is sufficient to make a hearing man a qualified teacher of the deaf, but the arrangement is based on the right principle, and it sets his feet on the right path to learn how to teach—so far as this art can be learned. The recent regulation of the board of education in England, prohibiting hearing pupil teachers in schools for the deaf, is deplorable, retrograde and inimical to the best interests of the deaf. It shows a complete ignorance of their needs. The younger a teacher begins to mix with that class the better he will teach them.

In 1886 a royal commission investigated the condition and education of the deaf in Great Britain, and in 1889 issued its report. Some of the recommendations most worthy of notice were that deaf children from seven to sixteen years of age should be compelled to attend a day school or institution, part, or the whole, of the expense being borne by the local school authority; that technical instruction should be given, and that all the children should be taught to speak and lip-read on the "pure" oral method unless physically or mentally disqualified, those who had partial hearing or remains of speech being entirely educated by that method. To the last mentioned recommendation—concerning the method to be adopted—two of the commissioners took exception, and another stated his recognition of some advantage in the manual method.

As a result of the report of the royal commission a bill was passed in 1893 making it compulsory for all deaf children to be educated. This was to be done by the local education authority, either by providing day classes or an institution for them, or by sending them to an already existing institution, parents having the choice, within reasonable limits, of the school to which the child should go. School-board classes came into existence in almost every large town where there was no institution, and sometimes where one existed. Those who uphold the day-school system advance the arguments that the pupils are not, under it, cut off from the influence of home life as they are in institutions; that such influences are of great advantage; that this system permits the deaf to mix freely with their hearing brethren, &c. The objections, however, to this arrangement outweigh its possible advantages. The latter, indeed, amount to little; for home influences in many cases, especially in the poorer parts of the large cities, are not the best, and communication with the hearing children who attend some of the day schools may not be an unmixed blessing, nor is freedom to run wild on the streets between school hours. But it may be urged further that it is difficult, except in very large towns, to obtain a sufficient number of deaf children attending a day school to classify them according to their status, while it is more than one teacher can do to give sufficient attention to several children, each at a different stage of instruction from any other. Moreover, the deaf need more than mere school work; they need training in morals and manners, and receive much less of it from their parents than their hearing brothers and sisters. This can only be given in an institution wherein they board and lodge as well as attend classes. The existing institutions were from 1893 placed, by the act of that date, either partly or wholly under the control of the school board. They were put under the inspection of the government, and as long as they fulfilled the requirements of the inspectors as regards education, manual and physical training, outdoor recreation and suitable class-room and dormitory accommodation, they might remain in the hands of a committee who collected, or otherwise provided, one-third of the total expenditure, and received two-thirds from public sources. Or else, the institution might be surrendered entirely to the management of the public school authority, and then the whole of the expenditure was to be borne by that body. Extra government grants of five guineas per pupil are now given for class work and manual or technical training. Such is the state of

things at the present day, except, of course, that the school board has given place to the county council as local authority.

Some teachers have asked for the children to be sent to school at the age of five instead of seven. This savours of another confession that the "pure" oral method had not done what was expected of it at first. First, the demand was for the method itself; then came requests for more teachers, so that, the classes being smaller, each pupil should receive more attention; this meant more money, and so this was asked for; then day schools would remedy the failure by giving the pupils opportunities of talking with the public in general; then we were told the teachers were unskilful; finally, more time is needed. And yet the *language* of the pupils is no better to-day than it was in 1881, even though they were at school only four or five years then as opposed to nine or ten now.

Foreign schools.

To Addison's *Report on a Visit to some Continental Schools for the Deaf* (1904-1905) we are indebted for the following information. The new school at Frankfort-on-Maine, accommodating forty or fifty children at a cost of £40 to £50 per head, is modelled on the plan of a family home. The main objects are to obtain good speech and lip-reading and to use these colloquially; the work is very thorough and the teaching very skilful. At Munich those of the hundred pupils who have some hearing are separated from the others and taught by ear as well as eye. At Vienna (Royal Institution) a small proportion of the pupils are day scholars, as they are at Munich, and the teaching is, of course, carried on by the oral method, as it is all over Germany. Here, however, the teachers "think it impossible to educate fully all deaf-mutes by the oral method only." In the Jews' Home at Vienna the semi-deaf are taught by the acoustic method, and are not allowed to see the teacher's lips at all. At Dresden, a large school of 240 pupils, the director favours smaller institutions than his own, considers the oral method possible for all but the "weak-minded deaf," and divides his pupils into A, B and C divisions, according to intellect. In the first division good speech is obtained. Saxony boasts a home for deaf homeless women, grants premiums for deaf apprentices, and trains its teachers of the deaf in the institution itself—a good record and plan. In the royal institution at Berlin Addison saw good lip-reading and thorough work, though the deaf in the city—as in most of the schools—signed. The men in Berlin "like the adult deaf generally, were all in favour of a combination of methods, and condemned the pure oral theory as impracticable." At Hamburg, again, "hand signs" were used at least for Sunday service. Schleswig has two schools. Pupils are admitted first to the residential institution, where they are instructed for a year, and are then divided into A, B and C classes, "according to intellect." The lowest class (C) remain at this institution for the rest of the eight years, and a "certain amount of signing" is allowed in their instruction. A and B classes are boarded out in the town and attend classes at a day school specially built for them, being taught orally exclusively.

In Denmark Addison saw what impressed him most. All the children of school age go to Fredericia and remain for a year in the boarding institution. They are then examined and the semi-deaf—29% of the whole—are sent to Nyborg. The rest—all the totally deaf—remain another year at Fredericia and are then divided into the A, B and C divisions before mentioned, and on the same criterion—intellect. Those in C—the lowest class, 28% of the totally deaf—are sent to Copenhagen, where they are taught by the manual method, no oral work being attempted. Those in B class, numbering 19% of the deaf, remain in the residential institution in Fredericia and are taught orally, while the best pupils—A class—are boarded out in the town and attend a special day school. These form 26% of the deaf, and those with whom they live encourage them to speak when out of as well as when in school. The buildings and equipment generally are excellent. "Hand signs" are used at Nyborg, indicating the position of the vocal organs when speaking, and, as might be expected, the "lip"-reading is 90% more correct when these symbols—infinitely more visible than most of the movements of the vocal organs and face when speaking—are used at the same time. The idea of these hand signs, by the way, corresponds to that of Graham Bell's *Visible Speech*, in which a written symbol is used to indicate the position of the vocal organs when uttering each sound; it is a kind of phonetic writing which is to a slight extent illustrative at the same time. We find natural signs of the utmost value when teaching articulation, to describe the position of the vocal organs. We give these details from Mr Addison's notes because it is to Germany that so many look for guidance to-day, and it is the home of the so-called "pure" oral method; while the system of classification in Denmark into the four schools which are controlled by one authority, struck him very favourably and so is given rather fully.

In France most of the schools are supported by charity, and the only three government institutions are those at Paris for boys, with 263 pupils lately, at Bordeaux for girls, having 225 inmates, and at Chambéry with 86 boys and 38 girls. In the great majority the method of instruction is professedly pure oral. "But," said Henri Gaillard (*Report, World's Congress of the Deaf*, Missouri, 1904), "this is only in appearance. In reality all of the schools use the combined method; only they are not willing to admit it, because the oral method is the official method, imposed by the inspectors of the minister of the interior."

In Italy, again, we are told that the teachers sign in most of the schools, which are professedly pure oral.

In Sweden, schools for the deaf have ceased to depend, as they did up to 1891, upon private benevolence. The system is generally the combined, and in schools where the oral method is adopted the pupils are divided into A, B and C divisions, as in Denmark and Dresden, in the two latter divisions of which signs are allowed. In Norway the method is the oral.

Methods of Teaching.—There have always been two principal methods of teaching the deaf, and all education at the present time is carried on by means of one or other or both of these. Where there is sufficient hearing to be utilized, instruction is sometimes given thereby as well, though this auricular method does not seem to make much headway, and experience is not in favour of believing that the sense of hearing, where a little exists, can be "cultivated" to any marked degree. It is really impossible to draw hard and fast lines between these means of instruction. One merges into another, and this other into the next; and no two teachers will, or can, adopt exactly the same lines. It is not desirable that they should, for much must be left to individuality. Orders, rules, methods, should not be absolute laws. Observe them generally, but dispense with them as circumstances, the pupil and opportunity may require. Strong individuality, sympathy, enthusiasm, long intercourse with the deaf, are needed in the teacher, and it is surely obvious that every teacher should have a full command of all the primary means of instruction to begin with, and not of one only.

Where deafness is absolute, or practically so, we have to seek for means that will appeal to the eye instead of the ear. Of these, we have the sign language, writing and printing, pictures, manual alphabets and lip-

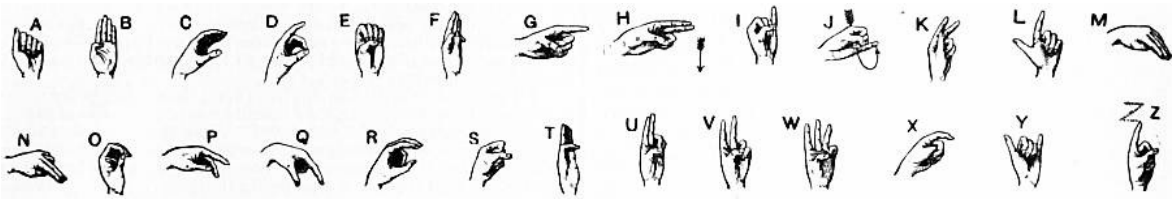
reading. We have to choose which of these is to be used, if not all, and which must be rejected, if any. Moreover, we have to decide how much or how little one or another is to be adopted if we employ more than one. Hence it is obvious that there may be many different systems and subdivisions of systems. But the two main methods are the *manual*, which generally depends upon all the above-mentioned means of appealing to the eye except lip-reading, and the *oral*, which adopts what the manual method rejects, uses writing and printing and perhaps pictures, but excludes finger-spelling and (theoretically) signs. To these two we must add a third means of instruction—the *combined system*—which rejects no means of teaching, but uses all in most cases. The dual method need hardly be called a separate method or system, for it implies simply the use of the manual method for some pupils and of the oral for others. Nor need we call the mother's (= intuitive or natural) a separate method in the sense in which we are using the word here, for it is rather a mode of procedure which can be applied manually or orally indifferently. The same may be said of the grammatical "method"; also of the "word method," which is really the "mother's." The "eclectic method" is practically the combined system, or something between that and the dual method, and hardly needs separate classification.

Let us notice the manual method, the oral method, and the combined system, considering with the last the "dual method."

Manual.

The chief elements of the manual method are finger-spelling, reading and writing and signing. These are used, that is to say, as means of teaching English and imparting ideas. Signs are used to awaken the child's thoughts, finger-spelling and writing are used to express these thoughts in the vernacular. The latter are used to express English, the former to explain English.

We give two manual alphabets, the one-handed being used in America, on the continent of Europe with some variations and additions, in Ireland, and also to some extent in England; the two-handed in Great Britain, Ireland and Australia. A speed of 130 words a minute can be attained when spelling on the fingers. Words are quite readable at this speed.



The Manual Alphabet. (One-handed.)

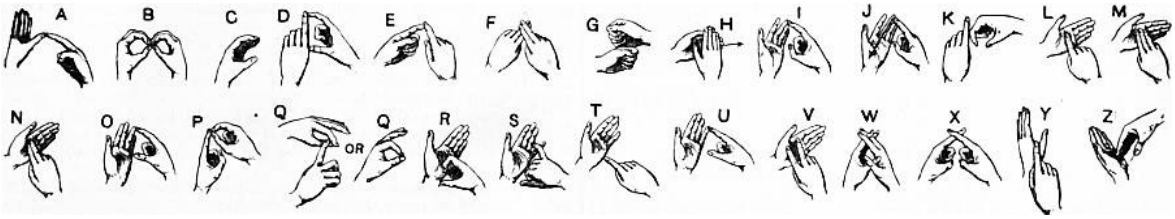


FIG. 2.—The Manual Alphabet. (Two-handed.)

Although reading and writing are common to both methods, the manual and oral, as a matter of fact they seem to be used considerably more in the former than in the latter.

Oral.

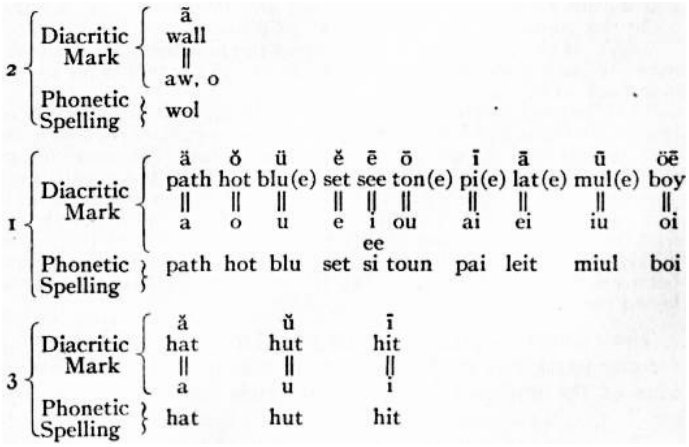
In the oral method articulation and lip-reading are chiefly relied upon; reading and writing are also adopted. The phonetic values of the letters are taught, not the names of the letters; for instance, the *sound* of the letter *ă* in "hat" is taught instead of the *name* of the letter (long A), though of course the latter is taught where such is the proper pronunciation, as in "hate."

Here is a chart which was lately in use:

Articulation Sheets.

ANALYSIS OF THE VOWEL SOUNDS.							
Long.		Middle.		Short.		Broad.	
Diacritic mark.	Phonetic spelling.	Diacritic mark.	Phonetic spelling.	Diacritic mark.	Phonetic spelling.	Diacritic mark.	Phonetic spelling.
fāt(e)	= feit	fär	= far	făt	= fat	fâll	= fawl fol
mē	= mee mi			mĕt	= met		
pīn(e)	= pain			pĭn	= pin		
nō	= nou	möve	= muv	nŏt	= not		
tūb(e)	= tiub	büll	= bul	tŭb	= tub		

Order in which the Vowel Sounds are to be taught.



The consonants are as follows, though the order of teaching them varies:—

p; f; s; h; sh; v = *f*; th (thin; moth); *th* (then; smooth); l; r; t; k; b; d; g (go; egg); z = *s*; m; n; ch = tsh; j = dzh = g; ph = f; kc = k; cs = s; q = kw; x = ks; ng; w = oo; wh = hw; y = e.

The following mode of writing the sounds is now preferred by some as it renders the diacritic marks unnecessary:— 892

Middle, Broad and Long Vowel Sounds.

ar	or	oo	ee	er	oa	igh	ai	ew	oi	ou
	aw		ea	ir	o-e	i-e	a-e	u-e	oy	ow
	au			ur			ay			
	a—									

Short Vowel Sounds.

a o oo e i u

Consonants.

h	p	ph f	t	s	th	sh	ch	k ck	l	r	m	n	ng	w
	b	v	d	z	*th*	zh	j dzh	g						

These charts are given as examples of those used, but they vary in different schools, as does the order of teaching the vowel and consonant sounds and the combinations. The exact order is not important. Words are made up by combining vowels and consonants as soon as the pupil can say each sound separately.

Here are extracts from the directions on articulation written by a principal to the teacher of the lowest class, which show the method of procedure:—

> “(1) Produce the sound of a letter. Each pupil to reproduce, and write it on the tablet.
>
> (2) Point to the letter on the tablet, and make each pupil say it.
>
> (3) The same with combinations of vowels and consonants.
>
> (4) Instead of tablet, each pupil to use rough exercise-book.
>
> (5) Write on tablet and make each pupil articulate from teacher’s writing.
>
> (6) When a combination is made of which a word may be made make all write it in their books, thus:—‘te —tea,’ ‘shō—show,’ ‘ŏv—of,’ ‘nālz—nails,’ &c.
>
> (7) When one pupil produces a combination correctly make the others lip-read it from him. In this way make them exercise each other.
>
> (8) When they have a good many sounds and combinations written in their books make them sit down and say them off their books as hearing children do.
>
> (9) Make them say the sounds off the cards, and form combinations on the cards for them to say.
>
> (10) Take each vowel separately and make each pupil use it before and after each consonant.
>
> (11) Take each consonant and put it before and after each vowel.
>
> “The above will suggest other exercises to the teacher.
>
> “Give breathing exercises. Incite emulation as to deep breathing and slow expiration. Never force the voice.

Make the pupil speak out, but do not let him strain either the voice or vocal organs. Do not force the tongue, lips, or any organ into position more than you can help. Do all as gently as possible. Register their progress. 'Ä' (as in 'path'; 'father'). As 'Ä' is the basis of all the vowels, being most like all, it is taken first. It is an open vowel. Do not make grimaces, or exaggerate. If false sound be produced do not let the pupil speak loudly; make him speak quietly. If nasal sound be produced do not pinch the nose, but first take the back of the child's hand, warmly breathe on it, or get a piece of glass, and let the child breathe on it, or press the back of the tongue down. Show the child that when you are saying 'a' your tongue lies flat or nearly so, and you do not raise the back of the tongue. Prefix 'h' to 'a' and make the pupil say 'ha' first, then 'a' alone.

"'P.' If the child does not imitate at the first the teacher should take the back of the hand and let the child feel the puff of air as 'p' is formed on the lips.

"'P' is produced by the volume of air brought into the cavity of the mouth being, checked by the perfect closure of the lips, which are then opened, and the accumulated air is propelled. The outburst of this propelled air creates the sound of 'p.' Take the pupil to see porridge boiling. Pretend to smoke. 'P' is taken first because it has no vibration and is the most simple. The consonants should first be joined to each vowel separately, and to prevent the pupils making an after-sound the letters should be said with a pause between, viz. 'A . . p,' and as they become more familiar with them, lessen the pause until it is pronounced properly: —'ap.'"

These directions, which are only brief examples of those given for one particular subject in one particular class, will give an idea of the mode of beginning to teach articulation and lip-reading.

Combined method.

The combined system, as before mentioned, makes use of both the manual and oral method, as well as the auricular, without any hard and fast rule as regards the amount of instruction to be given by means of each, but using more of one and less of another, or *vice versa*, according to the aptitude of the child. It thus follows the sensible, obvious plan of fitting the method to the child and not the unnatural one of forcing the child to try to fit the method.

The following is the way the same principal would teach language to beginners by the combined system:—

"The letters p, q, b and d of the Roman text are to be taught first. The pupils are to do them 9 in. long on the blackboard or tablet first; then trace them on the frames; then on slips of paper with pen and ink, or in rough exercise-book with pen and ink.

"The whole of the Roman text is then to be taught in the same manner, also the small and capital script.

"When the English alphabet has been mastered in the above four forms the pupil may proceed to the printing and writing of his own name. Then his teacher's and class-mates' names. Then the names of other persons and the places, things and actions with which he has to do in his daily life. Every direction the teacher has to give in school and out of school should be expressed in speech, writing or finger-spelling, or by any two or all three means. Repetition of such directions by the pupil enables him to learn words before he has finished the alphabet.

"All words to be spelled on one hand first; then two. When a few words have been memorized, they should be written on slips of paper, then in the exercise-books and dated. After this there should be further repetition and exercising. The same course should be taken with phrases and short sentences. Names of persons should be written on cards and slips of paper and pinned to the chest. Names of things to be affixed to them, or written on them. Names of apartments on cards laid in the rooms. Where the object is not available use a picture, or draw the outline and make pupil do the same. Never nod, or point, or jerk the finger, or use any other gesture, without previously giving the word, and when the latter is understood drop the gesture altogether.

"Never allow a single mistake to pass uncorrected, and make pupils always learn the corrections.

"Language should be a translation of life. It should proceed all day long, out of school as well as in it. If spoken so much the better, but finger-spelling is not a hindrance but a valuable help to its acquisition.

"In most language lessons, especially those exemplifying a particular form of sentence, the pupils should:

"(1) Correct each other's mistakes. Correct 'mistakes' designedly made by the teacher.

"(2) Teacher rubs out a word here and there on the blackboard or tablet; pupils to supply them.

"(3) Pupils to answer questions, giving the subject, predicate and object of the sentence as required, *e.g.* 'A farmer ploughs the ground.' 'Who ploughs the ground?' 'What does a farmer do?' 'What does he plough?' Also additional and illustrative questions; *e.g.* 'Does the ground plough the farmer?' 'Does a farmer plough the sea?' 'Does he eat the ground?' &c.

"The pupils should learn meanings or synonyms of unfamiliar words before such words are signed.

"(4) Teacher gives a word, and requires pupils to exemplify it in a sentence, *e.g.* 'sows,' 'He sows the seed.'

"(5) Let them give as many sentences as they can think of in the same form.

"Occurrences, incidents, objects, pictures, reading-books, newspaper cuttings and correspondence should all be used."

The best system.

The "pure" oral method, as before noticed, came with a bound into popularity in the early seventies. Since then it has had everything in its favour, but the results have been by no means entirely satisfactory, and there is a marked tendency among advocates of this method to withdraw from the extreme position formerly held. Opinion has gradually veered round till they have come to seek for some sort of *via media* that shall embrace the good points of both methods. Some now suggest the "dual method"—that those pupils who show no aptitude for oral training shall be taught exclusively by the manual method and the rest by the oral only. While this is a concession which is positively amazing when compared with the title of the booklet containing utterances of the Abbé Tarra, president of the Milan conference in 1880—"The *Pure* Oral Method the *Best* for *All* Deaf Children"!—yet we believe that in no case should the instruction be given by the oral method alone, and that the best system is

the “combined.” That the combined system is detrimental to lip-reading has not much more than a fraction of truth in it, for if the command of language is better the pupils can supply the lacunae in their lip-reading from their better knowledge of English. It is found that they have constantly to guess words and letters from the context. Teach all by and through finger-spelling, reading, writing and signing where necessary to explain the English, and teach those in whose case it is worth it by articulation and lip-reading as well. Signs should be used less and less in class work, and English more and more exclusively as the pupil progresses—English in any and every form. A proportion of teachers should be themselves deaf, as in America. They are in perfect understanding and sympathy with their pupils, which is not always the case with hearing teachers. Statistics which we collected in London showed the following results of the education of 403 deaf pupils after they had left school:—

	Manual.	Combined.	Oral.
Quite satisfactory result	65%	51%	20%
Moderate success	29%	41%	35%
Unsatisfactory result	5%	7%	44%

That the combined system should show to slightly less advantage than the exclusively manual method is what we might perhaps expect, for the time given to oral instruction means time taken from teaching language speedily, the manual method being, we believe, the best of all for this. But it may be worth while to lose a little in command of language for the sake of gaining another means of expressing that language. Hence we advocate the combined system, regarding speech as merely a means of expressing English, as writing and finger-spelling are, and a good sentence written or finger-spelled as being preferable to a poorer one which is spoken, no matter how distinct the speech may be. It is no answer to point to a few isolated cases where the oral method is considered to have succeeded, for one success does not counterbalance a failure if by another method you would have had two successes; and, moreover, these oral successes would have been still greater successes—we are taking language in any form as our criterion—had the teacher fully known and judiciously used the manual method as well as the oral.

The *exclusive* use of the oral method leads, generally speaking, to comparative failure, for the following, among other, reasons:—(1) It is a slow way of teaching English, the learning to speak the elements of sound taking months at least, and seldom being fully mastered for years. The “word method,” by the way, starts at once with words without taking their component phonetic elements separately; but it has yet to be proved that any quicker progress is made by this means of teaching speech than by the other. (2) Lip-reading is, to the deaf, sign-reading with the disadvantage of being both microscopic and partially hidden. The deaf hear nothing, they only partly *see* tiny movements of the vocal organs. Finger-spelling, writing, signing, are incomparably more visible, while 130 words a minute can be attained by finger-spelling, and read at that speed. (3) The signs—as they are to the deaf—made by the vocal organs are entirely arbitrary, and have not even a fraction of the redeeming feature of naturalness which oralists demand in ordinary gestures. (4) Circumstances, such as light, position of the speaker, &c., must be favourable for the lip-reading to approach certainty. (5) Styles of speech vary, and it is a constant experience that even pupils who comparatively easily read their teacher’s lips, to whose style of utterance they are accustomed, fail to read other people’s lips. (6) There is a great similarity between certain sounds as seen on the lips, *e.g.* between *t* and *d*, *f* and *v*, *p* and *b*, *s* and *z*, *k* and *g*. Which is meant has usually to be guessed from the context, and this requires a certain amount of knowledge of language, which is the very thing that is needed to be imparted. (7) The deliberate avoidance by the teacher of the pupil’s own language—signs—as an aid to teaching him English. If a hearing boy does not understand the meaning of a French word he looks it up in the dictionary and finds its English equivalent. If the deaf boy does not understand a word in English, the simplest, quickest, best way to explain it is, in most cases, to sign it. (8) The distaste of the pupil for the method. This is common. (9) The mechanical nature of the method. There is nothing to rouse his interest nor to appeal to his imagination in it. (10) The temptation to the teacher to use very simple phrases, owing to the difficulty the pupil has in reading others from his lips. Consequently the pupil comparatively seldom learns advanced language.

Other means of educating the deaf in addition to the oral should have a fair trial in modern conditions for the same length of time that the oral method has been in operation. To consider pupils taught manually in oral schools fair criteria of what can be done by the manual method or combined system, when those pupils have confessedly been relegated to the manual class because of “dulness” (as in the case of the C divisions in Denmark and Dresden), is obviously unfair. This division, moreover, assumes that the “pure” oral method is the best for the brightest pupils. The comparing of oral pupils privately taught by a tutor to themselves with manual pupils from an institution crippled and hampered by need of funds, where they had to take their chance in a class of twelve, and the comparison of oral pupils of twelve years’ standing with combined system pupils of four years’, are also obviously unfair. Reference may be made on this subject to Heidsiek’s remarkable articles on the question of education, which appeared in the *American Annals of the Deaf* from April 1899 to January 1900.

The opinions of the deaf themselves as to the relative merits of the methods of teaching also demand particular attention. The ignoring of their expressed sentiments by those in authority is remarkable. In the case of school children it might fairly be argued that they are too young to know what is good for them, but with the adult deaf who have had to learn the value of their education by bitter experience in the battle of life it is otherwise. In Germany, the home of the “pure” oral method, 800 deaf petitioned the emperor against that method. In 1903 no fewer than 2671 of the adult deaf of Great Britain and Ireland who had passed through the schools signed a petition in favour of the combined system. The figures are remarkable, for children under sixteen were excluded, those who had not been educated in schools for the deaf were excluded, and the education of the deaf has only lately been made compulsory, while many thousands who live scattered about the country in isolation probably never even heard of the petition, and so could not sign it. In America an overwhelming majority favour the combined system, and it is in America that by far the best results of education are to be seen. At the World’s Congress of the Deaf at St Louis in 1904 the combined system was upheld, as it was at Liége. From France, Germany, Norway and Sweden, Finland, Italy, Russia, everywhere in fact where they are educated, the deaf crowd upon us with expressions of their emphatic conviction, repeated again and again, that the combined system is what meets their needs best and brings most happiness into their lives. The majority of deaf in every known country which is in favour of this means of education is so

great that we venture to say that in no other section of the community could there be shown such an overwhelming preponderance of opinion on one side of any question which affects its well-being. In the case of the rare exceptions, the pupil has almost always been brought up in the strictest ignorance of the manual method, which he has been sedulously taught to regard as clumsy and objectionable.

The Blind Deaf.

In the summary tables (p. 283) of the 1901 British census the following numbers are given of those suffering from other afflictions besides deafness:—

1. Blind and deaf and dumb	58
2. Blind and deaf	389
3. Blind, deaf and dumb and lunatic	5
4. Blind, deaf and lunatic	5
5. Deaf and dumb and lunatic	136
6. Deaf and lunatic	51
7. Blind, deaf and dumb and feeble-minded	5
8. Blind, deaf and feeble-minded	8
9. Deaf and dumb and feeble-minded	221
10. Deaf and feeble-minded	100

In addition to these, 2 are said to be blind, dumb and lunatic; 20 dumb and lunatic; 3 blind, dumb and feeble-minded, and 222 dumb and feeble-minded. These are certainly outside our province, which is the deaf. The “dumbness” in these four classes is aphasia, due to some brain defect.

Of those in the list, classes 7, 8, 9 and 10 are (we are strongly of opinion) incorrectly described, being, as we think, composed of those who are simply feeble-minded as well as, in classes 7 and 8, blind. Their so-called “deafness” is merely inability of the brain to notice what the ear does actually hear and to govern the vocal organs to produce articulate sound. Many of classes 9 and 10, however, may not be “feeble-minded” at all, but only rather dull pupils whom their teachers have failed to educate.

It is safe to say that in some instances in classes 3, 4, 5 and 6 the persons were only assumed to be deaf. Again, cases of deaf people who to all appearance could not fairly be called insane but who may have had violent temper or some slight eccentricity being relegated to an asylum have come to our notice. A good teacher might accomplish much with some of these described as lunatic in classes 5 and 6. Finally, classes 3 and 4 may have become lunatic owing to the loneliness and brooding inseparable to a great extent from such terrible afflictions as blindness and deafness combined. Probably the isolation became intolerable, and if only they had had some one who understood them to educate them their reason might have been saved.

We are most concerned with the first two classes, and in considering them have to take individual cases separately, as there is no regular institution for them in Great Britain.

Mr W. H. Illingworth, head master of the Blind School at Old Trafford, Manchester, tells how David Maclean, a blind and deaf boy, was taught, in the 1903 report of the conference of teachers of the deaf. The boy lost both sight and hearing, but not before six years of age, which was an advantage, and could still speak or whisper to some extent when admitted to school. His teacher began with kindergarten and attempts at proper voice-production. He gave the sound of “ah” and made David feel his larynx. Then he tickled the boy under his arms, and when he laughed made him feel his own larynx, so that the boy should notice the similarity of the vibration. Then, acting on the theory that brain-waves are to some extent transmittable, Mr Illingworth procured a hearing boy as companion, and, ordering him to keep his mind fixed on the work and to place one hand on David’s shoulder, made him repeat what was articulated. The blind-deaf boy’s right hand was placed on Mr Illingworth’s larynx and the left on the companion’s lips. Thus the pupil felt the sound and the companion’s imitation of it, and soon reproduced it himself. From this syllables and words were formed by degrees. The pupil knew the forms of some letters of the alphabet in the Roman type before he lost sight and hearing, and the connexion between them and the Braille characters and manual alphabet was the next step achieved. This, and all the steps, were aided to a great extent by the hearing and seeing boy companion’s sympathetic influence and concentration of mind, in Mr Illingworth’s opinion. After this stage his progress was comparatively quick and easy; he read from easy books in Braille, and people spelled to him in the ordinary way by forming the letters with their right hand on his left.

From Mr B. H. Payne of Swansea comes the following account of how four blind-deaf pupils were taught:—

> “We have received four pupils who were deaf-mute and blind, one of them being also without the sense of smell. One was born deaf, the others having lost hearing in childhood. There was no essential difference between the methods employed in their education and those of ‘sighted’ deaf children. Free-arm writing of ordinary script was taught on the blackboard, the teacher guiding the pupil’s hand, or another pupil guiding it over the teacher’s pencilling. The script alphabet was cut on a slate, and the pupil’s pencil made to run in the grooves. The one-hand alphabet, used with the left hand, was employed to distinguish the letters so written. The script alphabet was also formed in wire for him. The object was to enable the pupil when he had gained language to write to friends and others who were unacquainted with Braille, but the latter notation was taught to enable the pupil to profit by the literature provided for the blind. Both one- and two-hand alphabets were taught, the teacher forming the letters with one of his own hands upon the pupil’s hand. The name of the object presented to the pupil was spelled and written repeatedly until he had memorized it. Qualities were taught by comparison, and actions by performance. The words ‘Come with me’ were spelled before he was guided to any place, and other sentences were spelled as they would be spoken to a ‘hearing’ child in appropriate associations. The blind pupil followed with his hands the signs made by junior pupils who were unacquainted with language, and in this way readily learned to sign himself, the art being of advantage in stimulating and in forming the mind, and explaining language to him. One of the pupils was confirmed, and in preparation for the rite over 800 questions were put to him by finger-spelling. His education was continued in Braille. The deaf-born boy developed a fair voice, and could imitate sounds by placing his hand on a

speaker's mouth. Two of them had a keen sense of humour, and would slyly move the finger to the muscles of their companion's face to feel the smile with which a bit of pleasantry was responded to. In connexion with the pupil who was confirmed, the vicar who examined him declared that none of his questions had been answered better even by candidates possessed of all their faculties than they were by this blind-deaf boy."

Mr W. M. Stone, principal of the Royal Blind School at West Craigmillar, Edinburgh, gives this very interesting information:

"We have five blind-deaf children at this institution, and all are wonderfully clever and intelligent. In all cases the children possessed hearing for a time and had some knowledge—very slight in some cases—of language. The method of teaching is, first to teach them the names of common objects on their fingers. A well-known object is put in the child's hand and then the word is spelled on the hand,—the child's hand of course. The child learns to associate these signs—he does not know they are letters—with the object, and so he learns a name. Other names are then given and similar names are associated together, and by noticing the difference in the names the child gradually grasps the idea of an alphabet. For instance, if he learns the words cat, bat and mat, he will quickly distinguish that the words are alike except in their initial letters. When in this way language has been acquired he is taught the Braille system of reading for the blind and his progress is now very rapid. This method may appear very complicated and difficult, but in reality it is not so. There are no institutions in Great Britain specially for the blind-deaf, nor are there any in America. I do not know of any on the continent. Our own blind children here are receiving the same education as our other children, and in some ways are more advanced than seeing and hearing children of their own ages. They not only read, write and do arithmetic, but they do typewriting and much manual work."

Mr Addison mentions two deaf and blind pupils who were taught by the late Mr Paterson of Manchester, and a third in the same school later on. Another was taught in the asylum for the blind in Glasgow, though she only lost hearing and became deaf at ten.

Mr William Wade has written a monograph on the blind-deaf of America, in the preface to which he points out, rightly, that the education of the blind-deaf is not such a stupendous task as people imagine it to be.

"It may not be amiss," he says, "to state the methods of teaching the first steps to a deaf-blind pupil, that the public may see how exceedingly simple the fundamental principles are, and it should be remembered that those principles are exactly the same in the cases of the deaf and of the deaf-blind, the only difference being in the application—the deaf *see*, the deaf-blind *feel*. Some familiar, tangible object—a doll, a cup, or what not —is given to the pupil, and at the same time the name of the object is spelled into its hand by the manual alphabet." (The one-hand alphabet is in vogue in America.) "By patient persistence, the pupil comes to recognize the manual spelling as a *name* for a familiar object, when the next step is taken—associating familiar acts with the corresponding manual spelling. A continuation of this simple process gradually leads the pupils to the comprehension of language as a means for communication of thoughts." Mr Wade is right. Given a sympathetic, resourceful teacher with strong individuality, common-sense, patience, and the necessary amount of time, anything and everything in the way of teaching them is not only possible but certain to be achieved. Language,—give the deaf and the blind-deaf a working command of that and everything else is easy.

In the New York Institution for the Deaf ten blind-deaf pupils were educated, up to the year 1901. Nearly all of these lost one or both senses after they had been able to acquire some knowledge with their aid. In the Perkins Institution for the Blind, Boston, five were taught. It was here that Laura Bridgman was educated by Dr Samuel G. Howe (*q.v.*); all honour is due to him for being the pioneer in attempting to teach this class of the community, for she was the first blind-deaf person to be taught. Many other schools for the deaf or blind have admitted one or two pupils suffering from both afflictions. In all, seventy cases are mentioned by Mr Wade of those who are quite blind and deaf, and others of people who are partially so. The most interesting, of course, of all these is Helen Keller, if we except Laura Bridgman, in whose case the initial attempt to teach the blind-deaf was made. Helen Keller was taught primarily by finger-spelling into her hand, and signing (which she, of course, felt with her hands) where necessary. Her first teacher was Miss Sullivan. The pupil "acquired language by practice and habit rather than by study of rules and definitions." Finger-spelling and books were the two great means of educating her at all times. After her grasp of language had been brought to a high standard, Miss Fuller gave her her first lessons in speech, and Miss Sullivan continued them, the method being that of making the pupil feel the vocal organs of the teacher. She learnt to speak well, and to tell (with some assistance from finger-spelling) what some people say by feeling their mouth. Her literary style became excellent; her studies included French, German, Latin, Greek, arithmetic, algebra, geometry, history, ancient and modern, and poetry and literature of every description. Of course she had many tutors, but Miss Sullivan was "eyes and ears" at all times, by acting as interpreter, and this patient teacher had the satisfaction of seeing her pupil pass the entrance examination of Harvard University. To all time the success attained in educating Helen Keller will be a monument of what can be accomplished in the most favourable conditions.

(A. H. P.)

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1 The two words are common to Teutonic languages, cf. Ger. *taub* and *dumm* (only in the sense of "stupid"), Dutch *doof* and *dom*; the original meaning seems to have been dull of perception, stupid, obtuse, and the words may be ultimately related. The Gr. τυφλός blind, and τῦφος, smoke, mist, probably show the same base.

2 For our résumé of the history we are indebted solely to Arnold (*Education of Deaf Mutes, Teachers' Manual*) as far as the date of the founding of the Old Kent Road Institution.

DEÁK, FRANCIS (Ferencz), (1803-1876), Hungarian statesman, was born at Söjtör in the county of Zala, on the 17th of October 1803. He came of an ancient and distinguished noble family, and was educated for the

law at Nagy-Kanizsá, Pápá, Raab and Pest, and practised first as an advocate and ultimately as a notary. His first case was the defence of a notorious robber and murderer. His reputation in his own county was quickly established, and when in 1833 his elder brother Antal, also a man of extraordinary force of character, was obliged by ill-health to relinquish his seat in the Hungarian parliament, the electors chose Ferencz in his stead. He took an active part in the proceedings of the diet at Pressburg and made the acquaintance of Ödon Beöthy and the other Liberal leaders. No man owed less to external advantages. He was to all appearance a simple country squire. His true greatness was never exhibited in debate. It was in friendly talk, generally with a pipe in his mouth and an anecdote on the tip of his tongue, that he exercised his extraordinary influence over his fellows. Convinced from the first of his disinterestedness and sincerity, and impressed by his penetrating shrewdness and his instinctive faculty of always seizing the main point and sticking to it, his hearers soon felt an absolute confidence in the deputy from Zala county. Perhaps there is not another instance in history in which a man who was neither a soldier, nor a diplomatist, nor a writer, who appealed to no passion but patriotism, and who avoided power with almost oriental indolence instead of seeking it, became, in the course of a long life, the leader of a great party by sheer force of intellect and moral superiority.

During the diet of 1839-1840 Deák succeeded in bringing about an understanding between a reactionary government, sadly in want of money, and a Liberal opposition determined that the nation should have its political privileges respected. “Let us put all jealousy on one side and allow him the pre-eminence,” wrote Széchenyi of Deák (April 30th, 1840). Deák would not go to the diet of 1843-1844, though he had received a mandate, because his election was the occasion of bloodshed in the struggle between the Clericals who would have ousted him and the Liberals who brought him in. In 1848, however, he accepted the post of minister of justice offered to him by Louis Batthyány. He never ceased to urge moderation in those stormy days, holding rather with Eötvös and Batthyány than with Kossuth, and he went more than once to Vienna to endeavour to effect a compromise between the Radicals and the court. But when the ill-will of the Vienna government became patent, and the sentiments of the king doubtful, he resigned together with Batthyány, but without ceasing to be a member of the diet. He it was who drew up the resolution of the Lower House in reply to the rescript of the Austrian ministry demanding the repeal of the Hungarian constitution. It was he who urged the Hungarian cabinet not to depart a hair’s-breadth from their legitimate position. He was one of the parliamentary deputation which waited in vain upon Prince Windischgrätz in his camp. (See Hungary: *History*.) He then retired to his estate at Kehida. After the war of independence he was tried by court-martial, but acquitted.

During the years of repression he lived in complete retirement. He rejected Schmerling’s proposal that he should take part in the project of judicial reform, but on the other hand he held completely aloof from the widespread, secret revolutionary movements. After 1854 he spent the greater part of his time at Pest, and his little room at the “Queen of England” inn became the meeting-place for those patriots who in those dark days looked to the wisdom of Deák for guidance. He used every opportunity of stimulating the moral strength of the nation and keeping its hopes alive. He invited the nation to contribute to the support of the orphans of Vörösmarty when that great poet died. He drew up the petition of the academy to the government, in which he defended the maintenance of this asylum of the national language against Austrian intervention. He trusted that, as had so often happened in the course of Hungarian history, the weakness and blindness of the court would help Hungary back to her constitutional rights. Armed resistance he considered dangerous, but he was an immutable defender of the continuity of the Hungarian constitution on the basis of the reforms of 1848. His principles alienated him from the Kossuth faction, which looked for salvation to a second war with Austria, engineered from abroad; but he was equally opposed to the attitude of resignation taken up by the followers of Széchenyi, who, according to Deák, always regarded the world from a purely provincial point of view.

The war of 1859 convinced the Austrian government, at last, of the necessity of a reconciliation with Hungary; but the ensuing negotiations were conducted not through Deák, but through the Magyar Conservatives. In 1860 Deák rejected the October diploma (see Hungary: *History*), which was simply a cast-back to the Maria Theresa system of 1747; but, at the request of the government, he went to Vienna to set forth the national demands. On this occasion he insisted on the re-establishment of the constitution in its integrity as a *sine qua non*. Meanwhile, it became more and more evident that the Conservative party had no standing in the country. The majority of the deputies returned to the diet of 1861 were in favour of asserting their rights by a resolution of the House, instead of petitioning for them by an address to the crown; hence arose the two parties of the Addressers and the Resolutioners. The *Patent* of the 20th of February 1861 increased the uneasiness and suspicion of the nation; but Deák, now one of the deputies for Pest, was in favour of an address rather than of a resolution, and his great speech on the subject (May 13th, 1861) converted the majority hostile to an address into a majority for it. The object of the Addressers was to make the responsibility for a rupture rest on the Austrian government. Nevertheless, the court found the address so voted inadmissible; whereupon, on Deák’s motion, the Hungarian diet drew up a second address vigorously defending the rights of the nation, and solemnly protesting against the usurpations of the Austrian government. The speech which Deák made on this occasion was his finest effort. Henceforth all Europe identified his name with the cause of Hungary. The Magyar Conservatives hereupon entered into negotiations with Deák, and the Austrian government, more than ever convinced of the necessity of a reconciliation, was ready to take the first step, if Hungary would take the second and third. Deák now proposed that the sovereign himself should break away from counsellors who had sought to oppress Hungary, and should restore the constitution as a personal act. The worthy response to this loyal invitation was the dismissal of the Schmerling administration, the suspension of the February constitution and the summoning of the coronation diet. Of that diet Deák was the indispensable leader. Under his direction the Addressers and the Resolutioners coalesced, and he was entrusted with the difficult and delicate negotiations with the crown, which aimed at effecting a compromise between the Pragmatic Sanction of 1719, which established the indivisibility of the Habsburg monarchy, and the March decrees of 1848. The committee of which he was president had completed its work, when the war of 1866 broke out and all again became uncertain.

After Königgrätz the extreme parties in Hungary hoped to extort still more favourable terms from the

emperor; but Deák remained true to himself and to the constitutional principle. On the 18th of July he went to Vienna, to urge the necessity of forming a responsible Magyar ministry without delay. He offered the post of premier to Count Julius Andrássy, but would not himself take any part in the administration. The diet was resummoned on the 17th of November 1866 and, chiefly through the efforts of Deák, the responsible ministry was formed (February 17th, 1867). There was still one fierce parliamentary struggle, in which Deák defended the Composition (Ausgleich) of 1867, both against the Kossuthites and against the Left-centre, which had detached itself from his own party under the leadership of Kálmán Tisza (*q.v.*). He, a simple citizen, from pure patriotism, thus mediated between the crown and the people, as the Hungarian palatines were wont to do in years gone by, and it was the wish of the diet that Deák should exercise the functions of a palatine at the solemn ceremony of the coronation. This honour he refused, as he had refused every other reward and distinction. “It was beyond the king’s power to give him anything but a clasp of the hand.” His real 896
recompense was the assurance of the prosperity and the tranquillity of his country in the future, and the reconciliation of the nation and its sovereign. The consciousness of these great services even reconciled him to the loss of much of his popularity; for there can be no doubt that a large part of the Hungarian nation regarded the Composition of 1867 as a sort of surrender and blamed Deák as the author of it. The Composition was the culminating point of Deák’s political activity; but as a party-leader he still exercised considerable influence. He died at midnight of the 28th-29th of July 1876, after long and painful sufferings. His funeral was celebrated with royal pomp on the 3rd of February, and representatives from every part of Hungary followed the “Sage” to the grave. A mausoleum was erected by national subscription, and in 1887 a statue, overlooking the Danube, was erected to his memory.

See *Speeches* (Hung.) ed. by Manó Kónyi (Budapest, 1882); Z. Ferenczi, *Life of Deák* (Hung., Budapest, 1894); *Memorials of Ferencz Deák* (Hung., Budapest, 1889-1890); Ferencz Pulszky, *Charakterskizze* (Leipzig, 1876).

(R. N. B.)

DEAL, a market town, seaport and municipal borough in the St Augustine’s parliamentary division of Kent, England, 8 m. N.E. by N. of Dover on the South-Eastern & Chatham railway. Pop. (1901) 10,581. It consists of three divisions—Lower Deal, on the coast; Middle Deal; and, about a mile inland, though formerly on the coast, Upper Deal, which is the oldest part. Though frequented as a seaside resort, the town derives its importance mainly from its vicinity to the Downs, a fine anchorage, between the shore and the Goodwin Sands, about 8 m. long and 6 m. wide, in which large fleets of windbound vessels may lie in safety. The trade consequently consists largely in the supply of provisions and naval stores, which are conveyed to the ships in need of them by “hovellers,” as the boatmen are called all along the Kentish coast; the name is probably a corruption of *hobeler*, anciently applied to light-horsemen from the hobby or small horse which they rode. The Deal hovellers and pilots are famous for their skill. Boat-building and a few other industries are carried on. Among buildings the most remarkable are St Leonard’s church in Upper Deal, which dates from the Norman period; the Baptist chapel in Lower Deal, founded by Captain Taverner, governor of Deal Castle, in 1663; the military and naval hospital; and the barracks, founded in 1795. The site of the old navy yard is occupied by villas; and the esplanade, nearly four miles long, is provided with a promenade pier. The golf-links is well known. At the south end of the town is Deal Castle, erected by Henry VIII. in 1539, together with the castles of Sandown, Walmer and Sandgate. They were built alike, and consisted of a central keep surrounded by four lunettes. Sandown Castle, which stood about a mile to the east of Deal Castle, was of interest as the prison in which Colonel Hutchinson, the Puritan soldier, was confined, and is said to have died, September 1664. It was removed on becoming endangered by encroachments of the sea. The “captain” of Deal Castle is appointed by the lord warden of the Cinque Ports. The town is governed by a mayor, 6 aldermen and 18 councillors. Area, 1111 acres.

Deal is one of the possible sites of the landing-place of Julius Caesar in Britain. Later in the period of Roman occupation the site was inhabited, but apparently was not a port. In the Domesday Survey, Deal (*Dola*, *Dale*, *Dele*) is mentioned among the possessions of the canons of St Martin, Dover, as part of the hundreds of Bewsborough and Cornilo; it seems, however, from early times to have been within the liberty of the Cinque Ports as a member of Sandwich, but was not continuously reckoned as a member until Henry VI., on the occasion of a dispute as to its assessment, finally annexed it to their jurisdiction.

In the time of Henry VIII. Deal was merely a fishing village standing half-a-mile from the sea, but the growth of the English navy and the increase of trade brought men-of-war and merchant ships in increased numbers to the Downs. Deal began to grow in importance, and Lower or New Deal was built along the shore. The prosperity of the town has ever since depended almost entirely on its shipping trade. In 1699 the inhabitants petitioned for incorporation, since previously the town had been under the jurisdiction of Sandwich and governed by a deputy appointed by the mayor of that town; William III. by his charter incorporated the town under the title of mayor, jurats and commonalty of Deal, and he also granted a market to be held on Tuesday and Saturday, and fairs on the 25th and 26th of March, and on the 30th of September and 1st of October, with a court of Pie Powder. The Cinque Ports were first represented in the parliament of 1265; the two members returned by Sandwich represented Sandwich, Deal and Walmer, until they were disenfranchized by the act of 1885.

DEAL. (1) (A common Teutonic word for a part or portion, cf. Ger. *Teil*, and the Eng. variant “dole”), a

division or part, obsolete except in such phrases as “a great deal” or “a good deal,” where it equals quantity or lot. From the verb “to deal,” meaning primarily to divide into parts, come such uses as for the giving out of cards to the players in a game, or for a business transaction. (2) (Also a Teutonic word, meaning a plank or board, cf. Ger. *Diele*, Dutch *deel*), strictly a term in carpentry and joinery for a sawn plank, usually of pine or fir, 9 in. wide and 2 to 4½ in. thick. (See JOINERY.) The word is also used more loosely of the timber from which such deals are cut, thus “white deal” is used of the wood of the Norway spruce, and “red deal” of the Scotch pine.

DEAN (Lat. *decanus*, derived from the Gr. δέκα, ten), the style of a certain functionary, primarily ecclesiastical. Whether the term was first used among the secular clergy to signify the priest who had a charge of inspection and superintendence over two parishes, or among the regular clergy to signify the monk who in a monastery had authority over ten other monks, appears doubtful. “Decurius” may be found in early writers used to signify the same thing as “decanus,” which shows that the word and the idea signified by it were originally borrowed from the old Roman military system.

The earliest mention which occurs of an “archipresbyter” seems to be in the fourth epistle of St Jerome to Rusticus, in which he says that a cathedral church should possess one bishop, one archipresbyter and one archdeacon. Liberatus also (*Breviar.* c. xiv.) speaks of the office of archipresbyter in a manner which, as J. Bingham says, enables one to understand what the nature of his duties and position was. And he thinks that those are right who hold that the archipresbyters were the same as the deans of English cathedral churches. E. Stillingfleet (*Irenic.* part ii. c. 7) says of the archipresbyters that “the memory of them is preserved still in cathedral churches, in the chapters there, where the dean was nothing else but the archipresbyter; and both dean and prebendaries were to be assistant to the bishop in the regulating the church affairs belonging to the city, while the churches were contained therein.” Bingham, however, following Liberatus, describes the office of the archipresbyter to have been next to that of the bishop, the head of the presbyteral college, and the functions to have consisted in administering all matters pertaining to the church in the absence of the bishop. But this does not describe accurately the office of dean in an English cathedral church. The dean is indeed second to the bishop in rank and dignity, and he is the head of the presbyteral college or chapter; but his functions in no wise consist in administering any affairs in the absence of the bishop. There may be some matters connected with the ordering of the internal arrangements of cathedral churches, respecting which it may be considered a doubtful point whether the authority of the bishop or that of the dean is supreme. But the consideration of any such question leads at once to the due theoretical distinction between the two. With regard to matters spiritual, properly and strictly so called, the bishop is supreme in the cathedral as far as—and no further than—he is supreme in his diocese generally. With regard to matters material and temporal, as concerning the fabric of the cathedral, the arrangement and conduct of the services, and the management of the property of the chapter, &c., the dean (not excluding the due authority of the other members of the chapter, but speaking with reference to the bishop) is supreme. And the cases in which a doubt might arise are those in which the material arrangements of the fabric or of the services may be thought to involve doctrinal considerations.

The Roman Catholic writers on the subject say that there are two sorts of deans in the church—the deans of cathedral churches, and the rural deans—as has continued to be the case in the English Church. And the probability would seem to be that the former were the successors and representatives of the monastic decurions, the latter of the inspectors of “ten” parishes in the primitive secular church. It is thought by some that the rural dean is the lineal successor of the *chorepiscopus*, who in the early church was the assistant of the bishop, discharging most, if not all, episcopal functions in the rural districts of the diocese. But upon the whole the probability is otherwise. W. Beveridge, W. Cave, Bingham and Basnage all hold that the *chorepiscopi* were true bishops, though Romanist theologians for the most part have maintained that they were simple priests. But if the *chorepiscopus* has any representative in the church of the present day, it seems more likely that the archdeacon is such rather than the dean.

The ordinary use of the term dean, as regards secular bodies of persons, would lead to the belief that the oldest member of a chapter had, as a matter of right, or at least of usage, become the dean thereof. But Bingham (lib. ii. chap. 18) very conclusively shows that such was at no time the case; as is also further indicated by the maxim to the effect that the dean must be selected from the body of the chapter—“*Unus de gremio tantum potest eligi et promoveri ad decanatus dignitatem*.” The duties of the dean in a Roman Catholic cathedral are to preside over the chapter, to declare the decisions to which the chapter may have in its debates arrived by plurality of voices, to exercise inspection over the choir, over the conduct of the capitular body, and over the discipline and regulations of the church; and to celebrate divine service on occasion of the greater festivals of the church in the absence or inability of the bishop. With the exception of the last clause the same statement may be made as to the duties and functions of the deans of Church of England cathedral churches.

Deans had also a place in the judicial system of the Lombard kings in the 8th, 9th and 10th centuries. But the office indicated by that term, so used, seems to have been a very subordinate one; and the name was in all probability adopted with immediate reference to the etymological meaning of the word,—a person having authority over ten (in this case apparently) families. L. A. Muratori, in his *Italian Antiquities*, speaks of the resemblance between the *saltarii* or *sylvani* and the *decani*, and shows that the former had authority in the rural districts, and the latter in towns, or at least in places where the population was sufficiently close for them to have authority over ten families. Nevertheless, a document cited by Muratori from the archives of the canons of Modena, and dated in the year 813, recites the names of several “deaneries” (*decania*), and thus shows that the authority of the dean extended over a certain circumscription of territory.

In the case of the “dean of the sacred college,” the connexion between the application of the term and the etymology of it is not so evident as in the foregoing instances of its use; nor is it by any means clear how and when the idea of seniority was first attached to the word. This office is held by the oldest cardinal—*i.e.* he who has been longest in the enjoyment of the purple, not he who is oldest in years,—who is usually, but not necessarily or always, the bishop of Ostia and Velletri. Perhaps the use of the word “dean,” as signifying simply the eldest member of any corporation or body of men, may have been first adopted from its application to that high dignitary. The dean of the sacred college is in the ecclesiastical hierarchy second to the pope alone. His privileges and special functions are very many; a compendious account of the principal of them may be found in the work of G. Moroni, vol. xix. p. 168.

There are four sorts of deans of whom the law of England takes notice. (1) The dean and chapter are a council subordinate to the bishop, assistant to him in matters spiritual relating to religion, and in matters temporal relating to the temporalities of the bishopric. The dean and chapter are a corporation, and the dean himself is a corporation sole. Deans are said to be either of the old or of the new foundation—the latter being those created and regulated after the dissolution of the monasteries by Henry VIII. The deans of the old foundation before the Ecclesiastical Commissioners Act 1841 were elected by the chapter on the king’s *congé d’élire*; and the deans of the new foundation (and, since the act, of the old foundation also) are appointed by the king’s letters patent. It was at one time held that a layman might be dean; but since 1662 priest’s orders are a necessary qualification. Deaneries are sinecures in the old sense, *i.e.* they are without cure of souls. The chapter formerly consisted of canons and prebendaries, the dean being the head and an integral part of the corporation. By the Ecclesiastical Commissioners Act 1841, it is enacted that “all the members of the chapter except the dean, in every collegiate and cathedral church in England, and in the cathedral churches of St David and Llandaff, shall be styled canons.” By the same act the dean is required to be in residence eight months, and the canons three months, in every year. The bishop is visitor of the dean and chapter. (2) A dean of peculiars is the chief of certain peculiar churches or chapels. He “hath no chapter, yet is presentative, and hath cure of souls; he hath a *peculiar*, and is not subject to the visitation of the bishop of the diocese.” The only instances of such deaneries are Battle (Sussex), Bocking (Essex) and Stamford (Rutland). The deans of Jersey and Guernsey have similar status. (3) The third dean “hath no cure of souls, but hath a court and a *peculiar*, in which he holdeth plea and jurisdiction of all such ecclesiastical matters as come within his peculiar. Such is the dean of the arches, who is the judge of the court of the arches, the chief court and consistory of the archbishop of Canterbury, so called of Bow Church, where this court was ever wont to be held.” (See Arches, Court of.) The parish of Bow and twelve others were within the peculiar jurisdiction of the archbishop in spiritual causes, and exempted out of the bishop of London’s jurisdiction. They were in 1845 made part of the diocese of London. (4) Rural deans are clergymen whose duty is described as being “to execute the bishop’s processes and to inspect the lives and manners of the clergy and people within their jurisdiction.” (See Phillimore’s *Ecclesiastical Law*.)

In the colleges of the English universities one of the fellows usually holds the office of “dean,” and is specially charged with the discipline, as distinguished from the teaching functions of the tutors. In some universities the head of a faculty is called “dean,” and in each of these cases the word is used in a non-ecclesiastical and purely titular sense.

DEAN, FOREST OF, a district in the west of Gloucestershire, England, between the Severn and the Wye. It extends northward in an oval form from the junction of these rivers, for a distance of 20 m., with an extreme breadth of 10 m., and still retains its true forest character. The surface is agreeably undulating, its elevation ranging from 120 to nearly 1000 ft., and its sandy peat soil renders it most suitable for the growth of timber, which is the cause of its having been a royal forest from time immemorial. It is recorded that the commanders of the Armada had orders not to leave in it a tree standing. In the reign of Charles I. the forest contained 105,537 trees, and, straitened for money, the king granted it to Sir John Wyntour for £10,000, and a fee farm rent of £2000. The grant was cancelled by Cromwell; but at the Restoration only 30,000 trees were left, and Wyntour, the Royalist commander, having got another grant, destroyed all but 200 trees fit for navy timber. In 1680 an act was passed to enclose 11,000 acres and plant with oak and beech for supply of the dockyards; and the present forest, though not containing very many gigantic oaks, has six “walks” covered with timber in various stages of growth.

The forest is locally governed by two crown-appointed deputy gavellers to superintend the woods and mines, and four verderers elected by the freeholders, whose office, since the extermination of the deer in 1850, is almost purely honorary. From time immemorial all persons born in the hundred of St Briavel’s, who have worked a year and a day in a coal mine, become “free miners,” and may work coal in any part of the forest not previously occupied. The forest laws were administered at the Speech-House, a building of the 17th century in the heart of the forest, where the verderers’ court is still held. The district contains coal and iron mines, and quarries of building-stone, which fortunately hardly minimize its natural beauty. Near Coleford and Westbury pit workings of the Roman period have been discovered, and the Romans drew large supplies of iron from this district. The scenery is especially fine in the high ground bordering the Wye (*q.v.*), opposite to Symond’s Yat above Monmouth, and Tintern above Chepstow. St Briavel’s Castle, above Tintern, was the headquarters of the forest officials from an early date and was frequented by King John. It is a moated castle, of which the north-west front remains, standing in a magnificent position high above the Wye.

See H. G. Nicholls, *Forest of Dean* (London, 1858).

DEANE, RICHARD (1610-1653), British general-at-sea, major-general and regicide, was a younger son of Edward Deane of Temple Guiting or Guyting in Gloucestershire, where he was born, his baptism taking place on the 8th of July 1610. His family seems to have been strongly Puritan and was related to many of those Buckinghamshire families who were prominent in the parliamentary party. His uncle or great-uncle was Sir Richard Deane, lord mayor of London, 1628-1629. Of Deane's early life nothing is accurately known, but he seems to have had some sea training, possibly on a ship-of-war. At the outbreak of the Civil War he joined the parliamentary army as a volunteer in the artillery, a branch of the service with which he was constantly and honourably associated. In 1644 he held a command in the artillery under Essex in Cornwall and took part in the surrender after Lostwithiel. Essex (*Letter to Sir Philip Stapleton*, Rushworth Collection) calls him "an honest, judicious and stout man," an estimate of Deane borne out by Clarendon's "bold and excellent officer" (book xiv. cap. 27), and he was one of the few officers concerned in the surrender who were retained at the remodelling of the army. Appointed comptroller of the ordnance, he commanded the artillery at Naseby and during Fairfax's campaign in the west of England in 1645. In 1647 he was promoted colonel and given a regiment. In May of that year Cromwell was made lord-general of the forces in Ireland by the parliament, and Deane, as a supporter of Cromwell who had to be reckoned with, was appointed his lieutenant of artillery. Cromwell refused to be thus put out of the way, and Deane followed his example. When the war broke out afresh in 1648 Deane went with Cromwell to Wales. As brigadier-general his leading of the right wing at Preston contributed greatly to the victory. On the entry of the army into London in 1648, Deane superintended the seizure of treasure at the Guildhall and Weavers' Hall the day after Pride "purged" the House of Commons, and accompanied Cromwell to the consultations as to the "settlement of the Kingdom" with Lenthall and Sir Thomas Widdrington, the keeper of the great seal. He is rightly called by Sir J. K. Laughton (in the *Dict. of Nat. Biog.*) Cromwell's "trusted partisan," a character which he maintained in the active and responsible part taken by him in the events which led up to the trial and execution of the king. He was one of the commissioners for the trial, and a member of the committee which examined the witnesses. He signed the death warrant.

Deane's capacities and activities were now required for the navy. In 1649 the office of lord high admiral was put into commission. The first commissioners were Edward Popham, Robert Blake and Deane, with the title of generals-at-sea. His command at sea was interrupted in 1651, when as major-general he was brought back to the army and took part in the battle of Worcester. Later he was made president of the commission for the settlement of Scotland, with supreme command of the military and naval forces. At the end of 1652 Deane returned to his command as general-at-sea, where Monck had succeeded Popham, who had died in 1651. In 1653 Deane was with Blake in command at the battle off Portland and later took the most prominent and active part in the refitting of the fleet on the reorganization of the naval service. At the outset of the three days' battle off the North Foreland, the 1st, 2nd and 3rd of June 1653, Deane was killed. His body lay in state at Greenwich and after a public funeral was buried in Henry VII.'s chapel at Westminster Abbey, to be disinterred at the Restoration.

See J. Bathurst Deane, *The Life of Richard Deane* (1870).

DEANE, SILAS (1737-1789), American diplomat, was born in Groton, Connecticut, on the 24th of December 1737. He graduated at Yale in 1758 and in 1761 was admitted to the bar, but instead of practising became a merchant at Wethersfield, Conn. He took an active part in the movements in Connecticut preceding the War of Independence, and from 1774 to 1776 was a delegate from Connecticut to the Continental Congress. Early in 1776 he was sent to France by Congress, in a semi-official capacity, as a secret agent to induce the French government to lend its financial aid to the colonies. Subsequently he became, with Benjamin Franklin and Arthur Lee, one of the regularly accredited commissioners to France from Congress. On arriving in Paris, Deane at once opened negotiations with Vergennes and Beaumarchais, securing through the latter the shipment of many vessel loads of arms and munitions of war to America. He also enlisted the services of a number of Continental soldiers of fortune, among whom were Lafayette, Baron Johann De Kalb and Thomas Conway. His carelessness in keeping account of his receipts and expenditures, and the differences between himself and Arthur Lee regarding the contracts with Beaumarchais, eventually led, in November 1777, to his recall to face charges, of which Lee's complaints formed the basis. Before returning to America, however, he signed on the 6th of February 1778 the treaties of amity and commerce and of alliance which he and the other commissioners had successfully negotiated. In America he was defended by John Jay and John Adams, and after stating his case to Congress was allowed to return to Paris (1781) to settle his affairs. Differences with various French officials led to his retirement to Holland, where he remained until after the treaty of peace had been signed, when he settled in England. The publication of some "intercepted" letters in Rivington's *Royal Gazette* in New York (1781), in which Deane declared his belief that the struggle for independence was hopeless and counselled a return to British allegiance, aroused such animosity against him in America that for some years he remained in England. He died on shipboard in Deal harbour, England, on the 23rd of September 1789 after having embarked for America on a Boston packet. No evidence of his dishonesty was ever discovered, and Congress recognized the validity of his claims by voting $37,000 to his heirs in 1842. He published his defence in *An Address to the Free and Independent Citizens of the United States of North America* (Hartford, Conn., and London, 1784).

The Correspondence of Silas Deane was published in the Connecticut Historical Society's Collections, vol. ii.; and *The Deane Papers*, in 5 vols., in the New York Historical Society's *Collections* (1887-1890). See also Winsor's *Narrative and Critical History*, vol. vii. chap, i., and Wharton's *Revolutionary Diplomatic Correspondence of the United States* (6 vols., Washington, 1889).

DEATH, the permanent cessation of the vital functions in the bodies of animals and plants, the end of life or act of dying. The word is the English representative of the substantive common to Teutonic languages, as “dead” is of the adjective, and “die” of the verb; the ultimate origin is the pre-Teutonic verbal stem *dau-*; cf. Ger *Tod*, Dutch *dood*, Swed. and Dan. *död*.

For the scientific aspects of the processes involved in life and its cessation see Biology, Physiology, Pathology, and allied articles; and for the consideration of the prolongation of life see Longevity. Here it is only necessary to deal with the more primitive views of death and with certain legal aspects.

Ethnology.—To the savage, death from natural causes is inexplicable. At all times and in all lands, if he reflects upon death at all, he fails to understand it as a natural phenomenon; nor in its presence is he awed or curious. Man in a primitive state has for his dead an almost animal indifference. The researches of archaeologists prove that Quaternary Man cared little what became of his fellow-creature’s body. And this lack of interest is found to-day as a general characteristic of savages. The Goajiros of Venezuela bury their dead, they confess, simply to get rid of them. The Galibis of Guiana, when asked the meaning of their curious funeral ceremony, which consists in dancing on the grave, replied that they did it to stamp down the earth. Fuegians, Bushmen, Veddahs, show the same lack of concern and interest in the memory of the dead. Even the Eskimos, conspicuous as they are for their intelligence and sociability, save themselves the trouble of caring for their sick and old by walling them up and leaving them to die in a lonely hut; the Chukches stone or strangle them to death; some Indian tribes give them over to tigers, and the Battas of Sumatra eat them. This indifference is not dictated by any realization that death means annihilation of the personality. The savage conception of a future state is one that involves no real break in the continuity of life as he leads it. If a man dies without being wounded he is considered to be the victim of the sorcerers and the evil spirits with which they consort. Throughout Africa the death of anyone is ascribed to the magicians of some hostile tribe or to the malicious act of a neighbour. A culprit is easily discovered either by an appeal to a local diviner or in torturing some one into confession. In Australia it is the same. Mr Andrew Lang says that “whenever a native dies, no matter how evident it may be that death has been the result of natural causes, it is at once set down that the defunct was bewitched.” The Bechuanas and all Kaffir tribes believe that death, even at an advanced age, if not from hunger or violence, is due to witchcraft, and blood is required to expiate or avenge it. Similar beliefs are found among the Papuans, and among the Indians of both Americas. The history of witchcraft in Europe and its attendant horrors, so vividly painted in Lecky’s *Rise of Rationalism*, are but echoes of this universal refusal of savage man to accept death as the natural end of life. Even to-day the ignorant peasantry of many European countries, Russia, Galicia and elsewhere, believe that all disease is the work of demons, and that medicinal herbs owe their curative properties to their being the materialized forms of benevolent spirits.

This animistic tendency is a marked characteristic of primitive Man in every land. The savage explains the processes of inanimate nature by assuming that living beings or spirits, possessed of capacities similar to his own, are within the inanimate object. The growth of a tree, the spark struck from a flint, the devastating floods of a river, mean to him the natural actions of beings within the tree, stone or water. And thus too he explains to himself the phenomena of human life, believing that each man has within him a mannikin or animal which dictates his actions in life. This miniature man is the savage’s conception of the soul; sleep and trance being regarded as the temporary, death as the permanent, absence of the soul. Each individual is thus deemed to have a dual existence. This “subliminal” self (in modern terminology) has many forms. The Hurons thought that it possessed head, body, arms and legs, in fact that it was an exact miniature of a man. The Nootkas of British Columbia regard it as a tiny man, living in the crown of the head. So long as it stands erect, its possessor is well, but if it falls from its position the misfortunes of ill-health and madness at once assail him. The ancient Egyptian believed in the soul or “double.” The inhabitants of Nias, an island to the west of Sumatra, have the strange belief that to everyone before birth is given the choice of a long and heavy or short and light soul (a parallel belief may be found in early Greek philosophy), and his choice determines the length of life. Sometimes the soul is conceived as a bird. The Bororos of Brazil fancy that in that shape the soul of a sleeper passes out of the body during night-time, returning to him at his awakening. The Bella Coola Indians say the soul is a bird enclosed in an egg and lives in the nape of the neck. If the shell bursts and the soul flies away, the man must die. If however the bird flies away, egg and all, then he faints or loses his reason. A popular superstition in Bohemia assumes that the soul in the shape of a white bird leaves the body by way of the mouth. Among the Battas of Sumatra rice or grain is sprinkled on the head of a man who returns from a dangerous enterprise, and in the latter case the grains are called *padiruma tondi*, “means to make the soul (*tondi*) stay at home.” In Java the new-born babe is placed in a hen-coop, and the mother makes a clucking noise, as if she were a hen, to attract the child’s soul. It is regarded by many savage peoples as highly dangerous to arouse a sleeper suddenly, as his soul may not have time to return. Still more dangerous is it to move a sleeper, for the soul on its return might not be able to find the body. Flies and butterflies are forms which the souls are believed by some races to take, and the Esthonians of the island of Oesel think that the gusts of wind which whirl tornado-like through the roads are the souls of old women seeking what they can find.

But more widespread perhaps than any belief, from its simplicity doubtless, is the idea that the body’s shadow or reflexion is the soul. The Basutos think that crocodiles can devour the shadow of a man cast on the surface of water. In many parts of the world sorcerers are credited with supernatural powers over a man by an attack on his shadow. The sick man is considered to have lost his shadow or a part of it. Dante refers to the shadowless spectre of Virgil, and the folklore of many European countries affords examples of the prevalence of the superstition that a man must be as careful of his shadow as of his body. In the same way the reflexion-soul is thought to be subject to a malice of enemies or attacks of beasts and has been the cause of superstitions which in one form or another exist to-day. From the Fijian and Andaman islander who exhibits abject terror at seeing himself in a glass or in water, to the English or European peasant who covers up the mirrors or turns them to the wall, upon a death occurring, lest an inmate of the house should see his own face and have his own speedy demise thus prognosticated, the idea holds its ground. It was probably the origin of the story of Narcissus, and there is scarcely a race which is free from the haunting dread. Lastly the soul is pictured as being a man’s breath (*anima*), and this again has come down to us in literature, evidenced

by the fact that the word “breath” has become a synonym for life itself. The “last breath” has meant more than a mere metaphor. It expresses the savage belief that there departs from the dying in the final expiration a something tangible, capable of separate existence—the soul. Among the Romans custom imposed a sacred duty on the nearest relative, usually the heir, to inhale the “last breath” of the dying. Moreover the classics bear evidence to the sanctity with which sentiment surrounded the last kiss; Cicero, in his speech against Verres, saying “*Matres ab extremo complexu liberum exclusae: quae nihil aliud orabant nisi ut filiorum extremum spiritum ore excipere sibi liceret*.” Virgil, too, refers in the *Aeneid*, iv. 684, to the custom, which survives to-day as a ceremonial practice among many savage and semi-civilized people.

From the inability of the savage in all ages and in all lands to comprehend death as a natural phenomenon, there results a tendency to personify death, and myths are invented to account for its origin. Sometimes it is a “taboo” which has been broken and gives Death power over man. In New Zealand Maui, the divine hero of Polynesia, was not properly baptized. In Australia a woman was told not to go near a tree where a bat lived: she infringed the prohibition, the bat fluttered out, and death resulted. The Ningphoos were dismissed from Paradise and became mortal because one of them bathed in water which had been “tabooed” (Dalton, p. 13). Other versions of the Death-myth in Polynesia relate that Maui stole a march on Night as she slept, and would have passed right through her to destroy her, but a little bird which sings at sunset woke her, she destroyed Maui, and men lost immortality. In India Yama, the god of Death, is assumed, like Maui, to have been the first to “spy out the path to the other world.” In the Solomon Islands (*Jour. Anth. Inst.*, February 1881) “Koevari was the author of death, by resuming her cast-off skin.” The same story is told in the Banks Islands. The Greek myth (Hesiód, *Works and Days*, 90) alleged that mortals lived “without ill diseases that give death to men” till the cover was lifted from the box of Pandora. This personification of Death has had as a consequence the introduction into the folklore of many lands of stories, often humorous, of the tricks played on the Enemy of Mankind. Thus Sisyphus fettered Death, keeping him prisoner till rescued by Ares; in Venetian folklore Beppo ties him up in a bag for eighteen months; while in Sicily an innkeeper corks him up in a bottle, and a monk keeps him in his pouch for forty years. The German parallel is Gambling Hansel, who kept Death up a tree for seven years. Such examples might be multiplied unendingly, but enough has been said to show that the attitude of civilized man towards the sphinx-riddle of his end has been in part dictated and is even still influenced by the savage belief that to die is unnatural.

Law—Registration.—The registration of burials in England goes back to the time of Thomas Cromwell, who in 1538 instituted the keeping of parish registers. Statutory measures were taken from time to time to ensure the preservation of registers of burials, but it was not until 1836 (the Births and Deaths Registration Act) that the registration of deaths became a national concern. Other acts dealing with death registration were subsequently passed, and the whole law for England consolidated by the Births and Deaths Registration Act 1874. By that act, the registration of every death and the cause of the death is compulsory. When a person dies in a house information of the death and the particulars required to be registered must be given within five days of the death to the registrar to the best of the person’s knowledge and belief by one of the following persons:—(1) The nearest relative of the deceased present at the death, or in attendance during the last illness of the deceased. If they fail, then (2) some other relative of the deceased in the same sub-district (registrar’s) as the deceased. In default of relatives, (3) some person present at the death, or the occupier of the house in which, to his knowledge, the death took place. If all the above fail, (4) some inmate of the house, or the person causing the body of the deceased to be buried. The person giving the information must sign the register. Similarly, also, information must be given concerning death where the deceased dies not in a house.

Where written notice of the death, accompanied by a medical certificate of the cause of death, is sent to the registrar, information must nevertheless be given and the register signed within fourteen days after the death by the person giving the notice or some other person as required by the act. Failure to give information of death, or to comply with the registrar’s requisitions, entails a penalty not exceeding forty shillings, and making false statements or certificates, or forging or falsifying them, is punishable either summarily within six months, or on indictment within three years of the offence. Before burial takes place the clergyman or other person conducting the funeral or religious service must have the registrar’s certificate that the death of the deceased person has been duly registered, or else a coroner’s order or warrant. Failing the certificate, the clergyman cannot refuse to bury, but he must forthwith give notice in writing to the registrar. Failure to do so within seven days involves a penalty not exceeding ten pounds. Children must not be registered as still-born without a medical certificate or a signed declaration from some one who would have been required, if the child had been born alive, to give information concerning the birth, that the child was still-born and that no medical man was present at the birth, or a coroner’s order. The registration of deaths at sea is regulated by the act of 1874 together with the Merchant Shipping Act 1894. See further Birth and Burial and Burial Acts. Registers of death are, in law, evidence of the fact of death, and the entry, or a certified copy of it, will be sufficient evidence without a certificate of burial, although it is desirable that it should also be produced.

Presumption of Death.—The fact of death may, in English law, be proved not only by direct but by presumptive evidence. When a person disappears, so that no direct proof of his whereabouts or death is obtainable, death may be presumed at the expiration of seven years from the period when the person was last heard of. It is always, however, a matter of fact for the jury, and the onus of proving the death lies on the party who asserts it. In Scotland, by the Presumption of Life (Scotland) Act 1891, the presumption is statutory. In those cases where people disappear under circumstances which create a strong probability of death, the court may, for the purpose of probate or administration, presume the death before the lapse of seven years. The question of survivorship, where two or more persons are shown to have perished by the same catastrophe, as in cases of shipwreck, has been much discussed. It was at one time thought that there might be a presumption of survivorship in favour of the younger as against the older, of the male as against the female, &c. But it is now clear that there is no such presumption (*In re Alston*, 1892, P. 142). This is also the rule in most states of the American Union. The doctrine of survivorship originated in the Roman Law, which had recourse to certain artificial presumptions, where the particular circumstances connected with deaths were unknown. Some of the systems founded on the civil law, as the French code, have adopted certain rules of survivorship.

Civil Death is an expression used, in law, in contradistinction to natural death. Formerly, a man was said to be dead in law (1) when he entered a monastery and became professed in religion; (2) when he abjured the realm; (3) when he was attainted of treason or felony. Since the suppression of the monasteries there has been no legal establishment for professed persons in England, and the first distinction has therefore disappeared, though for long after the original reason had ceased to make it necessary grants of life estates were usually made for the terms of a man's *natural* life. The act abolishing sanctuaries (1623) did away with civil death by abjuration; and the Forfeiture Act 1870, that on attainder for treason or felony.

For the tax levied on the estate of deceased persons, and sometimes called "death duty," see SUCCESSION DUTY.

For the statistics of the death-rate of the United Kingdom as compared with that of the various European countries see UNITED KINGDOM. See also the articles ANNUITY; CAPITAL PUNISHMENT; CREMATION; INSURANCE; MEDICAL JURISPRUDENCE, &c.

DEATH-WARNING, a term used in psychical research for an intimation of the death of another person received by other than the ordinary sensory channels, *i.e.* by (1) a sensory hallucination or (2) a massive sensation, both being of telepathic origin. (See TELEPATHY.) Both among civilized and uncivilized peoples there is a widespread belief that the apparition of a living person is an omen of death; but until the Society of Psychical Research undertook the statistical examination of the question, there were no data for estimating the value of the belief. In 1885 a collection of spontaneous cases and a discussion of the evidence was published under the title *Phantasms of the Living*, and though the standard of evidence was lower than at the present time, a substantial body of testimony, including many striking cases, was there put forward. In 1889 a further inquiry was undertaken, known as the "Census of Hallucinations," which provided information as to the percentage of individuals in the general population who, at some period of their lives, while they were in a normal state of health, had had "a vivid impression of seeing or being touched by a living being or inanimate object, or of hearing a voice; which impression, so far as they could discover, was not due to any external cause." To the census question about 17,000 answers were received, and after making all deductions it appeared that death coincidences numbered about 30 in 1300 cases of recognized apparitions; or about 1 in 43, whereas if chance alone operated the coincidences would have been in the proportion of 1 to 19,000. As a result of the inquiry the committee held it to be proved that "between deaths and apparitions of the dying person a connexion exists which is not due to chance alone." From an evidential point of view the apparition is the most valuable class of death-warning, inasmuch as recognition is more difficult in the case of an auditory hallucination, even where it takes the form of spoken words; moreover, auditory hallucinations coinciding with deaths may be mere knocks, ringing of bells, &c.; tactile hallucinations are still more difficult of recognition; and the hallucinations of smell which are sometimes found as death-warnings rarely have anything to associate them specially with the dead person. Occasionally the death-warning is in the form of an apparition of some other person; it may also take the form of a temporary feeling of intense depression or other massive sensation.

BIBLIOGRAPHY.—Podmore, Gurney and Myers, *Phantasms of the Living* (1885); for the Census Report see *Proceedings of the Society for Psychical Research*, part xxvi.; see also F. Podmore, *Apparitions and Thought Transference*. For a criticism of the results of the Census see E. Parish, *Hallucinations and Illusions* and *Zur Kritik des telepathischen Beweismaterials*, and Mrs Sidgwick's refutation in *Proc. S.P.R.* part xxxiii. 589-601. The *Journal of the S.P.R.* contains the most striking spontaneous cases received from time to time by the society.

(N. W. T.)

DEATH-WATCH, a popular name applied to insects of two distinct families, which burrow and live in old furniture and produce the mysterious "ticking" vulgarly supposed to foretell the death of some inmate of the house. The best known, because the largest, is a small beetle, *Anobium striattum*, belonging to the family *Ptinidae*. The "ticking," in reality a sexual call, like the chirp of a grasshopper, is produced by the beetle rapidly striking its head against the hard and dry woodwork. In the case of the smaller death-watches, some of the so-called book-lice of the family *Psocidae*, the exact way in which the sound is caused has not been satisfactorily explained. Indeed the ability of such small and soft insects to give rise to audible sounds has been seriously doubted; but it is impossible to ignore the positive evidence on the point. The names *Atropos divinatoria* and *Clothilla pulsatoria*, given to two of the commoner forms, bear witness both to a belief in a causal connexion between these insects and the ticking, and to the superstition regarding the fateful significance of the sound.

DE BARY, HEINRICH ANTON (1831-1888), German botanist, was of Belgian extraction, though his family had long been settled in Germany, and was born on the 26th of January 1831, at Frankfort-on-Main. From 1849 to 1853 he studied medicine at Heidelberg, Marburg and Berlin. In 1853 he settled at Frankfort

as a surgeon. In 1854 he became privat-docent for botany in Tübingen, and professor of botany at Freiburg in 1855. In 1867 he migrated to Halle, and in 1872 to Strassburg, where he was the first rector of the newly constituted university, and where he died on the 19th of January 1888.

Although one of his largest and most important works was on the *Comparative Anatomy of Ferns and Phanerogams* (1877), and notwithstanding his admirable acquaintance with systematic and field botany generally, de Bary will always be remembered as the founder of modern mycology. This branch of botany he completely revolutionized in 1866 by the publication of his celebrated *Morphologie und Physiologie d. Pilze*, &c., a classic which he rewrote in 1884, and which has had a world-wide influence on biology. His clear appreciation of the real significance of symbiosis and the dual nature of lichens is one of his most striking achievements, and in many ways he showed powers of generalizing in regard to the evolution of organisms, which alone would have made him a distinguished man. It was as an investigator of the then mysterious Fungi, however, that de Bary stands out first and foremost among the biologists of the 19th century. He not only laid bare the complex facts of the life-history of many forms,—*e.g.* the Ustilagineae, Peronosporeae, Uredineae and many Ascomycetes,—treating them from the developmental point of view, in opposition to the then prevailing anatomical method, but he insisted on the necessity of tracing the evolution of each organism from spore to spore, and by his methods of culture and accurate observation brought to light numerous facts previously undreamt of. These his keen perception and insight continually employed as the basis for hypotheses, which in turn he tested with an experimental skill and critical faculty rarely equalled and probably never surpassed. One of his most fruitful discoveries was the true meaning of infection as a morphological and physiological process. He traced this step by step in *Phytophthora*, *Cystopus*, *Puccinia*, and other Fungi, and so placed before the world in a clear light the significance of parasitism. He then showed by numerous examples wherein lay the essential differences between a parasite and a saprophyte; these were by no means clear in 1860-1870, though he himself had recognized them as early as 1853, as is shown by his work, *Die Brandpilze*.

These researches led to the explanation of epidemic diseases, and de Bary's contributions to this subject were fundamental, as witness his classical work on the potato disease in 1861. They also led to his striking discovery of *heteroecism* (or *metoecism*) in the Uredineae, the truth of which he demonstrated in wheat rust experimentally, and so clearly that his classical example (1863) has always been confirmed by subsequent observers, though much more has been discovered as to details. It is difficult to estimate the relative importance of de Bary's astoundingly accurate work on the sexuality of the Fungi. He not only described the phenomena of sexuality in Peronosporeae and Ascomycetes—*Eurotium*, *Erysiphe*, *Peziza*, &c.—but also established the existence of parthenogenesis and apogamy on so firm a basis that it is doubtful if all the combined workers who have succeeded him, and who have brought forward contending hypotheses in opposition to his views, have succeeded in shaking the doctrine he established before modern cytological methods existed. In one case, at least (*Pyronema confluens*), the most skilful investigations, with every modern appliance, have shown that de Bary described the sexual organs and process accurately.

It is impossible here to mention all the discoveries made by de Bary. He did much work on the Chytridieae, Ustilagineae, Exoasceae and Phalloideae, as well as on that remarkable group the Myxomycetes, or, as he himself termed them, *Mycetozoa*, almost every step of which was of permanent value, and started lines of investigation which have proved fruitful in the hands of his pupils. Nor must we overlook the important contributions to algology contained in his earlier monograph on the Conjugatae (1858), and investigations on Nostocaceae (1863), *Chara* (1871), *Acetabularia* (1869), &c. De Bary seems to have held aloof from the Bacteria for many years, but it was characteristic of the man that, after working at them in order to include an account of the group in the second edition of his book in 1884, he found opportunity to bring the whole subject of bacteriology under the influence of his genius, the outcome being his brilliant *Lectures on Bacteria* in 1885. De Bary's personal influence was immense. Every one of his numerous pupils was enthusiastic in admiration of his kind nature and genial criticism, his humorous sarcasm, and his profound insight, knowledge and originality.

Memoirs of de Bary's life will be found in *Bot. Centralbl.* (1888), xxxiv. 93, by Wilhelm; *Ber. d. d. bot. Ges.* vol. vi. (1888) p. viii., by Reess, each with a list of his works; *Bot. Zeitung* (1889), vol. xlvii. No. 3, by Graf zu Soems-Laubach.

(H. M. W.)

DEBENTURES and **DEBENTURE STOCK.** One of the many advantages incident to incorporation under the English Companies Acts is found in the facilities which such incorporation affords a trading concern for borrowing on debentures or debenture stock. More than five hundred millions of money are now invested in these forms of security. Borrowing was not specifically dealt with by the Companies Acts prior to the act of 1900, but that it was contemplated by the legislature is evident from the provision in § 43 of the act of 1862 for a company keeping a register of mortgages and charges. The policy of the legislature in this, as in other matters connected with trading companies, was apparently to leave the company to determine whether borrowing should or should not form one of its objects.

The first principle to be borne in mind is that a company cannot borrow unless it is expressly or impliedly authorized to do so by its memorandum of association. In the case of a *trading* company borrowing is impliedly authorized as a necessary incident of carrying on the company's business. Thus a company established for the conveyance of passengers and luggage by omnibuses, a company formed to buy and run vessels between England and Australia, and a company whose objects included discounting approved commercial bills, have all been held to be trading companies with an incidental power of borrowing as such to a reasonable amount. A building society, on the other hand, has no inherent power of borrowing (though a limited statutory power was conferred on such societies by the Building Societies Act 1874); nor has a society

formed not for gain but to promote art, science, religion, charity or any other useful object. Public companies formed to carry out some undertaking of public utility, such as docks, water works, or gas works, and governed by the Companies Clauses Acts, have only limited powers of borrowing.

An implied power of borrowing, even when it attaches, is too inconvenient to be relied on in practice, and an express power is always now inserted in a joint stock company's memorandum of association. This power is in the most general terms. It is left to the articles to define the amount to be borrowed, the nature of the security, and the conditions, if any,—such as the sanction of a general meeting of shareholders,—on which the power is to be exercised. Under the Companies Act 1908, § 87, a company cannot exercise any borrowing power until it has fulfilled the conditions prescribed by the act entitling it to commence business: one of which is that the company must have obtained its "minimum subscription." A person who is proposing to lend money to a company must be careful to acquaint himself with any statutory regulations of this kind, and also to see (1) that the memorandum and articles of association authorize borrowing, and (2) that the borrowing limit is not being exceeded, for if it should turn out that the borrowing was in excess of the company's powers and *ultra vires*, the company cannot be bound, and the borrower's only remedy is against the directors for breach of warranty of authority, or to be surrogated to the rights of any creditors who may have been paid out of the borrowed moneys.

A company proposing to borrow usually issues a prospectus, similar to the ordinary share prospectus, stating the amount of the issue, the dates for payment, the particulars of the property to be comprised in the security, the terms as to redemption, and so on, and inviting the public to subscribe. Underwriting is also resorted to, as in the case of shares, to ensure that the issue is taken up. There is no objection to a company issuing debentures or debenture stock at a discount, as there is to its issuing its shares at a discount. It must borrow on the best terms its credit will enable it to obtain. A prospectus inviting subscriptions for debentures or debenture stock comes within the terms of the Directors' Liability Act 1890 (re-enacted in Companies Act 1908, § 84), and persons who are parties to it have the onus cast upon them, should the prospectus contain any misstatements, of showing that, at the time when they issued the prospectus, they had reasonable grounds to believe, and did in fact believe, that the statements in question were true; otherwise they will be liable to pay compensation to any person injured by the misstatements. A debenture prospectus is also within the terms of the Companies Act 1908. It must be filed with the registrar of joint stock companies (§ 80) and must contain all the particulars specified in § 81 of the act. (See Company.)

The usual mode of borrowing by a company is either on debentures or debenture stock. Etymologically, debenture is merely the Latin word *debentur*,—The first word in a document in common use by the crown in early times admitting indebtedness to its servants or soldiers. This was the germ of a security which has now, with the expansion of joint stock company enterprise, grown into an instrument of considerable complexity.

Debentures may be classified in various ways. From the point of view of the security they are either (1) debentures (simply); (2) mortgage debentures; (3) debenture bonds. In the debenture the security is a floating charge. In the mortgage debenture there is also a floating charge, but the property forming the principal part of the security is conveyed by the company to trustees under a trust deed for the benefit of the debenture-holders. In the debenture bond there is no security proper: only the covenant for payment by the company. For purposes of title and transfer, debentures are either "registered" or "to bearer." For purposes of payment they are either "terminable" or "perpetual" (see Companies Act 1908, § 103).

The Floating Debenture.—The form of debenture chiefly in use at the present day is that secured by a floating charge. By it the company covenants to pay to the holder thereof the sum secured by the debenture on a specified day (usually ten or fifteen years after the date of issue), or at such earlier date as the principal moneys become due under the provisions of the security, and in the meantime the company covenants to pay interest on the principal moneys until payment, or until the security becomes enforceable under the conditions; and the company further charges its undertaking and all its property, including its uncalled capital, with the payment of the amount secured by the debentures. Uncalled capital if included must be expressly mentioned, because the word "property" by itself will not cover uncalled capital which is only property potentially, *i.e.* when called up. This is the body of the instrument; on its back is endorsed a series of conditions, constituting the terms on which the debenture is issued. Thus the debenture-holders are to rank *pari passu* with one another against the security; the debenture is to be transferable free from equities between the company and the original holder; the charge is to be a floating charge, and the debenture-holders' moneys are to become immediately repayable and the charges enforceable in certain events: for instance, if the interest is in arrear for (say) two or three months, or if a winding-up order is made against the company, or a resolution for winding-up is passed. Other events indicative of insolvency are sometimes added in which payment is to be accelerated. The conditions also provide for the mode and form of transfer of the debentures, the death or bankruptcy of the holder, the place of payment, &c. The most characteristic feature of the security—the floating charge—grew naturally out of a charge on a company's undertaking as a going concern. Such a charge could only be made practicable by leaving the company free to deal with and dispose of its property in the ordinary course of its business—to sell, mortgage, lease, and exchange it as if no charge existed: and this is how the security works. The debenture-holders give the directors an implied licence to deal with and dispose of the property comprised in the security until the happening of any of the events upon which the debenture-holders' money becomes under the debenture conditions immediately repayable. Pending this the charge is dormant. The licence extends, however, only to dealings in *the ordinary course of business*. Payment by a company of its just debts is always in the ordinary course of business, but satisfaction by execution levied *in invitum* is not. This floating form of security is found very convenient both to the borrowing company and to the lender. The company is not embarrassed by the charge, while the lender has a security covering the whole assets for the time being, and can intervene at any moment by obtaining a receiver if his security is imperilled, even though none of the events in which the principal moneys are made payable have happened. If any of them has happened, for instance default in payment of interest, or a resolution by the company to wind up, the payment of the principal moneys is accelerated, and a debenture-holder can at once commence an action to obtain payment and to realize his security. At times a proviso is inserted in the conditions endorsed on the debenture, that the company is not to create any mortgage or

charge ranking in priority to or *pari passu* with that contained in the debentures. Very nice questions of priority have arisen under such a clause. A floating charge created by a company within three months of its being wound up will now be invalid under § 12 of the Companies Act 1908 unless the company is shown to have been solvent at the time, but there is a saving clause for cash paid under the security and interest at 5%.

Trust Deeds.—When the amount borrowed by a company is large, the company commonly executes a trust deed by way of further security. The object of such a trust deed is twofold: (1) it conveys specific property to the trustees of the deed by way of legal mortgage (the charge contained in the debentures is only an equitable security), and it further charges all the remaining assets in favour of the debenture-holders, with appropriate provisions for enabling them, in certain events similar to those expressed in the debenture conditions, to enforce the security, and for that purpose to enter into possession and carry on the business, or to sell it and distribute the proceeds; (2) it organizes the debenture-holders and constitutes in the trustees of the deed a body of experienced business men who can watch over the interests of the debenture-holders and take steps for their protection if necessary. In particular it provides machinery for the calling of meetings of debenture-holders by the trustees, and empowers a majority of (say) two-thirds or three-fourths in number and value at such meeting to bind the rest to any compromise or arrangement with the company which such majorities may deem beneficial. This is found a very useful power, and may save recourse to a scheme or arrangement first sanctioned under the machinery of the Joint Stock Companies Arrangement Act 1870 (Companies Act 1908, § 120).

Registration of Mortgages and Charges.—A company is bound, under the Companies Act 1862, to keep a register of mortgages and charges, but the register is only open for the inspection of persons who have actually become creditors of the company, not of persons who may be thinking of giving it credit, and the legislature recognizing its inadequacy provided in the Companies Act 1900 (§ 4 of act of 1908) for a public register at Somerset House of all mortgages and charges of certain specified classes by a company. If not registered within twenty-one days from their creation such mortgages and charges are made void—so far as they are securities—against the liquidator and any creditor of the company, but the debenture-holders retain the rights of unsecured creditors. An extension of the time for registering may be granted by the court, but it will only be without prejudice to the rights of third persons acquired before actual registration. These provisions for registration as amended are contained in the Companies Act 1908 (§ 93).

Debentures Registered and to Bearer.—Debentures are, for purposes of title and transfer, of two kinds—(1) registered debentures, and (2) debentures to bearer. Registered debentures are transferable only in the books of the company. Debentures to bearer are negotiable instruments and pass by delivery. Coupons for interest are attached. Sometimes debentures to bearer are made exchangeable for registered debentures and vice versa.

Redemption.—A company generally reserves to itself a right of redeeming the security before the date fixed by the debenture for repayment; and accordingly a power for that purpose is commonly inserted in the conditions. But as debenture-holders, who have got a satisfactory security, do not wish to be paid off, the right of redemption is often qualified so as not to arise till (say) five years after issue, and a premium of 5% is made payable by way of bonus to the redeemed debenture-holder. Sometimes the number of debentures to be redeemed each year is limited. The selection is made by drawings held in the presence of the directors. A sinking fund is a convenient means frequently resorted to for redemption of a debenture debt, and is especially suitable where the security is of a wasting character, leaseholds, mining property or a patent. Such a fund is formed by the company setting apart a certain sum each year out of the profits of the company after payment of interest on the debentures. Redeemed debentures may in certain cases be reissued; see Companies Act 1908 (§ 104).

Debenture Stock.—Debenture stock bears the same relation to debentures that stock does to shares. “Debenture stock,” as Lord Lindley states (*Companies*, 5th ed., 195), “is merely borrowed capital consolidated into one mass for the sake of convenience. Instead of each lender having a separate bond or mortgage, he has a certificate entitling him to a certain sum, being a portion of one large loan.” This sum is not uniform, as in the case of debentures, but variable. One debenture-stockholder, for instance, may hold £20 of the debenture stock, another £20,000. Debenture stock is usually issued in multiples of £10 or sometimes of £1, and is made transferable in sums of any amount not involving a fraction of £1. It is this divisibility of stock, whether debenture or ordinary stock, into quantities of any amount, which constitutes in fact its chief characteristic, and its convenience from a business point of view. It facilitates dealing with the stock, and also enables investors with only a small amount to invest to become stockholders. The property comprised in this security is generally the same as in the case of debentures. Debenture stock created by trading companies differs in various particulars from debenture stock created by public companies governed by the Companies Clauses Act. The debenture stock of trading companies is created by a contract made between the company and trustees for the debenture-stockholders. This contract is known as a debenture-stockholders’ trust deed, and is analogous in its provisions to the trust deed above described as used to secure debentures. By such a deed the company acknowledges its indebtedness to the trustees, as representing the debenture-stockholders, to the amount of the sum advanced, covenants to pay it, and conveys the property by way of security to the trustees with all the requisite powers and provisions for enabling them to enforce the security on default in payment of interest by the company or on the happening of certain specified events evidencing insolvency. The company further, in pursuance of the contract, enters the names of the subsisting stockholders in a register, and issues certificates for the amount of their respective holdings. These certificates have, like debentures, the conditions of the security indorsed on their back. Debenture stock is also issued to bearer. A deed securing debenture stock requires an *ad valorem* stamp.

Debenture Scrip.—Debentures and debenture stock are usually made payable in instalments, for example 10% on application, 10% on allotment and the remainder at intervals of a few months. Until these payments are complete the securities are not issued, but to enable the subscriber to deal with his security pending completion the company issues to him an interim scrip certificate acknowledging his title and exchangeable

on payment of the remaining instalments for debentures or debenture stock certificates. If a subscriber for debentures made default in payment the company could not compel him specifically to perform his contract, the theory of law being that the company could get the loan elsewhere, but this inconvenience is now removed (see § 105 of the Companies Act 1908).

Remedies.—When debenture-holders' security becomes enforceable there are a variety of remedies open to them. These fall into two classes—(1) remedies available without the aid of the court; (2) remedies available only with the aid of the court.

1. If there is a trust deed, the trustees may appoint a receiver of the property comprised in the security, and they may also sell under the powers contained in the deed, or under § 25 of the Conveyancing Act 1881. Sometimes, where there is no trust deed, similar powers—to appoint a receiver and to sell—are inserted in the conditions indorsed on the debentures.

2. The remedies with the aid of the court are—(*a*) an action by one or more debenture-holders on behalf of all for a receiver and to realize the security; (*b*) an originating summons for sale or other relief, under Rules of Supreme Court, 1883, O. lv. r. 5A; (*c*) an action for foreclosure where the security is deficient (all the debenture-holders must be parties to this proceeding); (*d*) a winding-up petition. Of these modes of proceeding, the first is by far the most common and most convenient. Immediately on the issue of the writ in the action the plaintiff applies for the appointment of a receiver to protect the security, or if the security comprises a going business, a receiver *and manager*. In due course the action comes on for judgment, usually on agreed minutes, when the court directs accounts and inquiries as to who are the holders of the debentures, what is due to them, what property is comprised in the security, and gives leave to any of the parties to apply in chambers for a sale. If the company has gone into liquidation, leave must be obtained to commence or continue the action, but such leave in the case of debenture-holders is *ex debito justitiae*. A debenture-holder action when the company is in winding up is always now transferred to the judge having the control of the winding-up proceedings. The administration of a company's assets in such actions by debenture-holders (debenture-holders' liquidations, as they are called) has of late encroached very much on the ordinary administration of winding up, and it cannot be denied that great hardship is often inflicted by the floating security on the company's unsecured creditors, who find that everything belonging to the company, uncalled capital included, has been pledged to the debenture-holders. The conventional answer is that such creditors might and ought to have inspected the company's register of mortgages and charges. The matter was fully considered by the departmental board of trade committee which reported in July 1906, but the committee, looking at the business convenience of the floating charge, saw no reason for recommending an alteration in the law.

Reconstruction.—When a company reconstructs, as it often does in these days, the rights of debenture-holders have to be provided for. Reconstructions are mainly of two kinds—(1) by arrangement, under the Joint Stock Companies Arrangement Act 1870, amended in 1900 and 1907, incorporated in act of 1908 (§ 120), and (2) by sale and transfer of assets, either under § 192 of the act of 1908, or under a power in the company's memorandum of association. By the procedure provided under (1) a petition for the sanction of the court to a scheme is presented, and the court thereupon directs meetings of creditors, including debenture-holders, to be held. A three-fourths majority in value of debenture-holders present at the meeting in person or by proxy binds the rest. Debenture-holders claiming to vote must produce their debentures at or before the meeting. Under the other mode of reconstruction—sale and transfer of assets—there is usually a novation, and the debenture-holders accept the security of the new company in the shape of debentures of equivalent value or—occasionally—of fully paid preference shares.

A point in this connexion, which involves some hardship to debenture-holders, may here be adverted to. It is a not uncommon practice for a solvent company to pass a resolution to wind up voluntarily for the purpose of reconstructing. The effect of this is to accelerate payment of the security, and the debenture-holders have to accept their principal and interest only, parting with a good security and perhaps a premium which would have accrued to them in a year or two. The company is thus enabled by its own act to redeem the reluctant debenture-holder on terms most advantageous to itself. To obviate this hardship, it is now a usual thing in a debenture-holders' trust deed to provide—the committee of the London Stock Exchange indeed require it—that a premium shall be paid to the debenture-holders in the event of the security becoming enforceable by a voluntary winding up with a view to reconstruction.

Public Companies.—Public companies, *i.e.* companies incorporated by special act of parliament for carrying on undertakings of public utility, form a class distinct from trading companies. The borrowing powers of these companies, the form of their debenture or debenture stock, and the rights of the debenture-holders or debenture-stockholders, depend on the conjoint operation of the companies' own special act and the Companies Clauses Acts 1845, 1863 and 1869. The provisions of these acts as to borrowing, being express, exclude any implicit power of borrowing. The first two of the above acts relate to mortgages and bonds, the last to debenture stock. The policy of the legislature in all these acts is the same, namely, to give the greatest facilities for borrowing, and at the same time to take care that undertakings of public utility which have received legislative sanction shall not be broken up or destroyed, as they would be if the mortgagees or debenture-holders were allowed the ordinary rights of mortgagees for realizing their security by seizure and sale. Hence the legislature has given them only "the fruit of the tree," as Lord Cairns expressed it. The debenture-holders or the debenture-stockholders may take the earnings of the company's undertaking by obtaining the appointment of a receiver, but that is all they can do. They cannot sell the undertaking or disorganize it by levying execution, so long as the company is a going concern; but this protecting principle of public policy will not be a bar to a debenture-holder, in his character of creditor, presenting a petition to wind up the company, if it is no longer able to fulfil its statutory objects. Railway companies have further special legislation, which will be found in the Railway Companies Powers Act 1864, the Railways Construction Facilities Act 1864 and the Railway Securities Act 1866.

Municipal Corporations and County Councils.—These bodies are authorized to borrow for their proper purposes on debentures and debenture stock with the sanction of the Local Government Board. See the

Municipal Corporations Act 1882, the Local Authorities' Loans Act 1875, and the Local Government (England and Wales) Act 1888.

United States.—In the United States there are two meanings of debenture—(1) a bond not secured by mortgage; (2) a certificate that the United States is indebted to a certain person or his assigns in a certain sum on an audited account, or that it will refund a certain sum paid for duties on imported goods, in case they are subsequently exported.

AUTHORITIES.—E. Manson, *Debentures and Debenture Stock* (London, 2nd ed., 1908); Simonson, *Debentures and Debenture Stock* (London, 2nd ed., 1902); Palmer, *Company Precedents* (*Debentures*) (3rd ed., London, 1907).

(E. MA.)

DEBORAH (Heb. for "bee"), the Israelite heroine in the Bible through whose encouragement the Hebrews defeated the Canaanites under Sisera. The account is preserved in Judges iv.-v., and the ode of victory (chap. v.), known as the "Song of Deborah," is held to be one of the oldest surviving specimens of Hebrew literature. Although the text of this *Te Deum* has suffered (especially in vv. 8-15) its value is without an equal for its historical contents. It is not certain that the poem was actually composed by Deborah (v. 1); ver. 7, which can be rendered "until *thou* didst arise, O Deborah," is indecisive. The poem consists of a series of rapidly shifting scenes; the words are often obscure, but the general drift of the whole can be easily followed. After the exordium, the writer describes the approach of Yahweh from his seats in Seir and Edom in the south to the help of his people—the language is reminiscent of Ps. lxviii. 7 sqq., Hab. iii. 3 seq. 12 seq. In the days of Shamgar the son of Anath the land had been insecure, the people were disarmed, and neither shield nor spear was to be seen among their forty thousand (cf. 1 Sam. xiii. 19-22, and for the number Josh. iv. 13). Then follows, apparently, a summons to magnify Yahweh. After an apostrophe to Deborah and Barak, the son of Abinoam, the meeting of the clans is vividly portrayed. Ephraim, with Benjamin behind him (for the wording, cf. Hos. v. 8), Machir (here the tribe of Manasseh) and Zebulun, Issachar and Naphtali, pour down into the valley of the Kishon. Not all the tribes were represented. Reuben was wavering, Gilead (*i.e.* Gad) remained beyond the Jordan, and Dan's interests were apparently with the sea-going Phoenicians (see DAN); their conduct is contrasted with the reckless bravery of Zebulun and Naphtali. Judah is nowhere mentioned; it lay outside the confederation. The Canaanite kings unite at Taanach by Megiddo, an ancient battlefield probably to be identified with Lejjūn. The heavens joined the fight against Sisera (cf. the appeal in Josh. x. 12 seq.), a storm rages, and the enemy are swept away in the flood. Meroz, presumably on the line of flight, is bitterly cursed for its inaction: "they came not to the help of Yahweh." In vivid contrast to this is the conduct of one of the Kenites: "blessed of all women is Jael, of all the nomad women is she blessed." The poem recounts how the fleeing king craves water, she gives him milk, and (as he drinks) she fells him (perhaps with a tent-peg); "at her feet he sank down, he fell, he lay, where he sank he lay overcome." The last scene paints the mother of Sisera impatiently awaiting the king. Her attendants confidently picture him dividing the booty—a maiden or two for each man, and richly embroidered cloth for himself. With inimitable strength the poet suddenly drops the curtain—"so perish thine enemies, all of them, Yahweh! But let them that love him be as the sun when it rises in its might."

The historical background of this great event is unknown. The Israelite confederation consists of central Palestine with the (east-Jordanic) Machir, and the northern tribes with the exception of Dan and Asher. This has suggested to some an invasion from the coast, or from the north by way of the coast, since had Dan and Asher fallen into the hands of the enemy, this would probably have been referred to in some way. Sisera is scarcely a Semitic name; a "Hittite" origin has been suggested.[1] Shamgar son of Anath seems equally foreign; the latter is the name of a Syrian goddess and the former recalls Sangara, a Hittite chief of Carchemish in the 9th century. The context suggests that Shamgar is a foreign oppressor (ver. 6), but he appears to have been converted subsequently into one of the "judges" of Israel (iii. 31), perhaps with the idea of bringing their total up to twelve.

The prose version (iv.) contains new and conflicting details. Deborah, whose home is placed under "Deborah's palm" between Ramah and Bethel, summons Barak from Kadesh-Naphtali to collect Naphtali and Zebulun, 10,000 strong, and to meet Sisera (who is here the general of a certain Jabin, king of Hazor) at Mt. Tabor. But Sisera marches south to Kishon, and after his defeat flees north through Israelite territory, past Hazor to the neighbourhood of Kadesh. His death, moreover, is differently described (iv. 21, v. 25-27), and Jael "who with inhospitable guile smote Sisera sleeping" (Milton) is guilty of an act which has possibly originated from a misunderstanding of the poem. In the prose narrative Jabin has nothing to do with the fight, whereas in Josh. xi. he is at the head of an alliance of north Canaanite kings who were defeated by Joshua at the waters of Merom. It would seem that certain elements which are inconsistent with the representation in Judg. v. belonged originally to the other battle. Kadesh, for example, might be a natural meeting-place for an attack upon Hazor, and the designation "Jabin's general," applied to Sisera, is probably due to the attempt to harmonize the two distinct stories. Moreover, Deborah, who is associated with the tribe of Issachar (v. 15), appears to have been confused with Rebekah's nurse, whose tomb lay near Bethel (Gen. xxxv. 5). Some more northerly place seems to be required, and it has been pointed out that the name corresponds with Daberath (modern Dabūrīyeh) at the foot of Tabor, on the border of Zebulun and Issachar. At all events, to represent her as a prophetess, judging the people of Israel (iv. 4 seq.), ill accords with both the older account (v.) and the general situation reflected in the earlier narratives in the book of Judges.

For fuller details see G. A. Cooke, *History and Song of Deborah* (1892), the commentaries on Judges and the histories of Israel. Cheyne, *Critica Biblica*, pp. 446-464, offers many new textual emendations. Paton (*Syria and Palestine*, p. 158 sqq.) suggests that the battle was against the Hittites (Sisera, a successor of Shamgar). See also L. W. Batten, J*ourn. Bibl. Lit.* (1905) pp. 31-40 (who regards Judg. v. and Josh. xi. as duplicates);

Winckler, *Gesch. Israels*, ii. 125-155; *Keilinschr. u. d. Alte Test.*([3]) p. 218; and Ed. Meyer, *Israeliten*, pp. 272 sqq., 487 sqq.

(S. A. C.)

1 The term "Hittite" is here used as a loose but convenient designation for closely related groups of N. Syria; see HITTITES.

DEBRECZEN, a town of Hungary, capital of the county of Hajdu, 138 m. E. of Budapest by rail. Pop. (1900) 72,351. It is the principal Protestant centre in Hungary, and bears the name of "Calvinistic Rome." Debreczen is one of the largest towns of Hungary, and is situated in the midst of a sandy but fertile plain. It consists of the inner old town, and several suburbs, which stretch out irregularly into the plain. The walls of the old town have given place to a broad boulevard and several open commons, beautifully laid out. The most prominent of its public buildings is the principal Protestant church, built at the beginning of the 19th century, which ranks as the largest in the country, but has no great architectural pretensions. In its immediate neighbourhood is the Protestant Collegium, for theology and law, which is one of the most frequented institutions of its kind in Hungary, being attended by over two thousand students. This college was founded in 1531, and possesses a rich library and other scientific collections. The town hall, the Franciscan church, the Piarist monastery and college, and the theatre are also worthy of mention. Amongst its educational establishments it includes an agricultural academy. The industries of the town are various, but none is of importance enough to give it the character of a manufacturing centre. Its tobacco-pipes, sausages and soap are widely known. It carries on an active trade in cattle, horses, corn and honey, while four well-attended fairs are held annually. The municipality of Debreczen owns between three hundred and four hundred square miles of the adjoining country, which possesses all the characteristics of the Hungarian *puszta*, and on which roam large herds of cattle.

The town is of considerable antiquity, but owes its development to the refugees who flocked from the villages plundered by the Turks in the 15th century. In 1552 it adopted the Protestant faith, and it had to suffer in consequence, especially when it was captured in 1686 by the imperial forces. In 1693 it was made a royal free city. In 1848-1849 it formed a refuge for the national government and legislature when Budapest fell into the hands of the Austrians; and it was in the great Calvinist church that, on Kossuth's motion (April 14th, 1849) the resolution was passed declaring the house of Habsburg to have forfeited the crown of St Stephen. On the 3rd of July the town was captured by the Russians.

DEBT (Lat. *debitum*, a thing owed), a definite sum due by one person to another. It may be created by contract, by statute or by judgment. Putting aside those created by statute, recoverable by civil process, debts may be divided into three classes, (1) judgment debts, (2) specialty debts, and (3) simple contract debts. As to judgment debts, it is sufficient to say that, when by the judgment of a court of competent jurisdiction an order is made that a sum of money be paid by one of two parties to another, such a debt is not only enforceable by process of court, but it can be sued upon as if it were an ordinary debt. A specialty debt is created by deed or instrument under seal. Until 1869 specialty debts had preference under English law over simple contract debts in the event of the bankruptcy or death of the debtor, but this was abolished by the Administration of Estates Act of that year. The main difference now is that a specialty debt may, in general, be created without consideration, as for example by a bond (a gratuitous promise under seal), and that a right of action arising out of a specialty debt is not barred if exercised any time within twenty years, whereas a right of action arising out of a simple contract debt is barred unless exercised within six years. (See LIMITATION, STATUTES OF.) Any other debt than a judgment or specialty debt, whether evidenced by writing or not, is a simple contract debt. There are also certain liabilities or debts which, for the convenience of the remedy, have been made to appear as though they sprang from contract, and are sometimes termed quasi-contracts. Such would be an admission by one who is in account with another that there is a balance due from him. Such an admission implies a promise to pay when requested and creates an actionable liability *ex contractu*. Or, when one person is compelled by law to discharge the legal liabilities of another, he becomes the creditor of the person for the money so paid. Again, where a person has received money under circumstances which disentitle him to retain it, such as receiving payment of an account twice over, it can generally be recovered as a debt.

At English common law debts and other choses in action were not assignable (see CHOSE), but by the Judicature Act 1873 any absolute assignment of any debt or other legal chose in action, of which express notice in writing is given to the debtor, trustee or other person from whom the assignor would have been entitled to receive or claim such debt, is effectual in law. Debts do not, as a general rule, carry interest, but such an obligation may arise either by agreement or by mercantile usage or by statute. The discharge of a debt may take place either by payment of the amount due, by accord and satisfaction, *i.e.* acceptance of something else in discharge of the liability, by set-off (*q.v.*), by release or under the law of bankruptcy (*q.v.*). It is the duty of a debtor to pay a debt without waiting for any demand, and, unless there is a place fixed on either by custom or agreement, he must seek out his creditor for the purpose of paying him unless he is "beyond the seas." Payment by a third person to the creditor is no discharge of a debt, as a general rule, unless the debtor subsequently ratifies the payment. When a debtor tenders the amount due to his creditor and the creditor refuses to accept, the debt is not discharged, but if the debtor is subsequently sued for the

debt and continues willing and ready to pay, and pays the amount tendered into court, he can recover his costs in the action. A creditor is not bound to give change to the debtor, whose duty it is to make tender in lawful money the whole amount due, or more, without asking for change. (See Payment.) A debtor takes the risk if he makes payment through the post, unless the creditor has requested or authorized that mode of payment. The payment of a debt is sometimes secured by one person, called a surety, who makes himself collaterally liable for the debt of the principal. (See Guarantee.) The ordinary method of enforcing a debt is by action. Where the debt does not exceed £100 the simplest procedure for its recovery is that of the county court, but if the debt exceeds £100 the creditor must proceed in the high court, unless the cause of action has arisen within the jurisdiction of certain inferior courts, such as the mayor's court of London, the Liverpool court of passage, &c. When judgment has been obtained it may be enforced either by process (under certain conditions) against the person of the debtor, by an execution against the debtor's property, or, with the assistance of the court, by attaching any debt owed to the debtor by a third person. Where a debtor has committed any act of bankruptcy a creditor or creditors whose aggregate claims are not less than £50 may proceed against him in bankruptcy (*q.v.*). Where the debtor is a company or corporation registered under the companies acts, the creditor may petition to have it wound up. (See Company.)

Imprisonment for debt, the evils of which have been so graphically described by Dickens, was abolished in England by the Debtors Act 1869, except in cases of default of payment of penalties, default by trustees or solicitors and certain other cases. But in cases where a debt or instalment is in arrear and it is proved to the satisfaction of the court that the person making default either has or has had since the date of the order or judgment the means to pay the sum in respect of which he has made default and has refused or neglected to pay, he may be committed to prison at the discretion of the judge for a period of not more than forty-two days. In practice, a period of twenty-one days is usually the maximum period ordered. Such an imprisonment does not operate as a satisfaction or extinguishment of the debt, and no second order of commitment can be made against him for the same debt, although where the court has made an order or judgment for the payment of the debt by instalments a power of committal arises on default of payment of each instalment. In Ireland imprisonment for debt was abolished by the Debtors Act (Ireland) 1872, and in Scotland by the Debtors (Scotland) Act 1880. In France it was abolished in 1867, in Belgium in 1871, in Switzerland and Norway in 1874, and in Italy in 1877. In the United States imprisonment for debt was universal under the common law, but it has been abolished in every state, except in certain cases, as where there is any suspicion of fraud or where the debtor has an intention of removing out of the state to avoid his debts. (See also Contract; Bankruptcy.)

DEBUSSY, CLAUDE ACHILLE (1862-), French composer, was born at St Germain-en-Laye on the 22nd of August 1862, and educated at the Paris Conservatoire under Marmontel, Lavignac, Massenet and Guiraud. There between 1874 and 1884 he gained many prizes for solfège, pianoforte playing, accompanying, counterpoint and fugue, and, in the last-named year, the coveted Grand Prix de Rome by means of his cantata *L'Enfant prodigue*. In this composition already were thought to be noticeable the germs of unusual and "new" talent, though in the light of later developments it is not very easy to discern them, for then Debussy had not come under the influence which ultimately turned his mind to the system he afterwards used, not only with peculiar distinction but also with particular individual and complete success. Nevertheless, the mind had clearly been prepared by nature for the reception of this influence when it should arise; for, in order to fulfil that condition of the Prix de Rome which entails the submitting periodically of compositions to the judges, Debussy sent to them his symphonic suite *Printemps*, to which the judges took exception on the ground of its formlessness. Following in the wake of *Printemps* came *La damoiselle élue* for solo, female voice and orchestra—a setting of a French version of Rossetti's "The Blessed Damosel"—which in the eyes of the judges was even more unorthodox than its predecessor, though, be it said, fault was found as much with the libretto as with the music. Both works were denied the customary public performance.

The Rome period over, Debussy returned to Paris, whence shortly he went to Russia, where he came directly under the influence referred to above. In Russia he absorbed the native music, especially that of Moussorgsky, who, recently dead, had left behind him the reputation of a "musical nihilist," and on his return to Paris Debussy devoted himself to composition, the stream of his muse being even in 1908 as fluent as twenty years before. To him public recognition was slow in coming, but in 1893 the Société Nationale de Musique performed his *Damoiselle élue*, in 1894 the Ysaye Quartet introduced the string quartet, while in the same year the *Prélude à l'après-midi d'un Faune* was heard, and brought Debussy's name into some prominence. As time passed the prominence grew, until the climax of Debussy's creative career was reached by the production at the Opéra Comique on the 30th of April 1902 of his masterpiece *Pelléas et Mélisande*. Herein lay the whole strength of Debussy's system, the perfection of his appeal to the mind and imagination as well as to the emotions and senses. Since its production the world has been enriched by *La Mer*, and by the *Ariettes oubliées*, but the lyric drama remains on its own lofty pedestal, a monument of elusive and subtle beauty, of emphatic originality and of charm. In an Apologia Debussy has declared that in composing *Pelléas* he "wanted to dispense with parasitic musical phrases. Melody is, if I may say so, almost anti-lyric, and powerless to express the constant change of emotion or life. Melody is suitable only for the chanson, which confirms a fixed sentiment. I have never been willing that my music should hinder, through technical exigencies, the change of sentiment and passion felt by my characters. It is effaced as soon as it is necessary that these should have perfect liberty in their gestures or in their cries, in their joy, or in their sorrow."

The list of Debussy's works is a lengthy one. Several of them have been referred to already. Among the others, of which the complete list is too long to print here, are the dances for chromatic harp or pianoforte; *Images*; incidental music to *King Lear*; the *Petite Suite*; *Trois Nocturnes*; innumerable songs, as *Proses Lyriques* (text by Debussy); two series of Verlaine's *Fêtes galantes*; *Cinq Poèmes de Baudelaire*; many

pianoforte pieces.

In 1891 Debussy was appointed critic of the *Revue Blanche*. In his first notice he expressed his faith thus: “I shall endeavour to trace in a musical work the many different emotions which have helped to give it birth, also to demonstrate its inner life. This, surely, will be accounted of greater interest than the game which consists in dissecting it as if it were a curious timepiece.”

As to the theories, so much debated, of this remarkable musician—probably in the whole range of musical history there has not appeared a more difficult theorist to “place.” Unquestionably Debussy has introduced a new system of colour into music, which has begun already to exert widespread influence. Roughly, Debussy’s system may be summarized thus:

His scale basis is of six whole tones (enharmonic), as (1) middle C, D, E, G♭, A♭, B♭, which are of excellent sound when superimposed in the form of two augmented unrelated triads.

B♭ G♭ or enharmonically D	A♯ F♯ D
A♭ E C	G♯ E C

used frequently incomplete (*i.e.* by the omission of one note) by Debussy.

E
C
A
F♯
D

Now, upon the basis of an augmented triad a tune may be played above it provided that it be based upon the six-tone scale, and a fugue may be written, the re-entry of the subject of which may be made upon any note of the scale, and the harmony will be complete. To associate this scale with the ordinary diatonic scale let a major 9th be taken, *e.g.*: one may conventionally flatten or sharpen the fifth of this (A becoming ♯ or ♭ as desired): if *both* the flattened and sharpened fifths be taken in the one chord this chord is arrived at:

E
C
B♭
A♭ (A♯ enharmonically altered to B♭)
F♯
D

which is composed of the notes of the aforesaid scale (1), and Debussy thereby proves his case to belong to the “primitifs.” It will be noticed that chords of the 9th in sequence and in all forms occur in Debussy’s music as well as the augmented triad harmonics, where the melodic line is based on the tonal scale. This, in all likelihood, is the outcome of Debussy’s instinctive feeling for the association of his so-called discovery with the ordinary scale. The “secret,” it may be added, comes not from Annamese music as has been frequently stated, but probably from Russia, where certainly it was used before Debussy’s rise.

(R. H. L.)

DECADE (from Gr. δέκα, ten), a group or series containing ten members, particularly a period of ten years. In the new calendar made at the time of the French Revolution in 1793, a decade of ten days took the place of the week. The word is also used of the divisions containing ten books or parts into which the history of Livy was divided.

DECAEN, CHARLES MATHIEU ISIDORE, Count (1769-1832), French soldier, was born at Caen on the 13th of April 1769. He was educated for the bar, but soon showed a strong preference for the military career, in which he quickly made his way during the wars of the French Revolution under Kléber, Marceau and Jourdan, in the Rhenish campaigns. In 1799 he became general of division, and contributed to the success of the famous attack by General Richepanse on the Austrian flank and rear at Hohenlinden (December 1800). Becoming known for his Anglophobe tendencies, he was selected by Napoleon early in the year 1802 for the command of the French possessions in the East Indies. The secret instructions issued to him bade him prepare the way, so that in due course (September 1804 was hinted at as the suitable time) everything might be ready for an attack on the British power in India. Napoleon held out to him the hope of acquiring lasting glory in that enterprise. Decaen set sail with Admiral Linois early in March 1803 with a small expeditionary

force, touched at the Cape of Good Hope (then in Dutch hands), and noted the condition of the fortifications there. On arriving at Pondicherry he found matters in a very critical condition. Though the outbreak of war in Europe had not yet been heard of, the hostile preparations adopted by the Marquis Wellesley caused Decaen to withdraw promptly to the Isle of France (Mauritius), where, during eight years, he sought to harass British trade and prepare for plans of alliance with the Mahratta princes of India. They all came to naught. Linois was captured by a British squadron, and ultimately, in 1811, Mauritius itself fell to the Union Jack. Returning to France on honourable terms, Decaen received the command of the French troops in Catalonia. The rest of his career calls for no special mention. He died of the cholera in 1832.

See M. L. E. Gautier, *Biographie du général Decaen* (Caen, 1850).

(J. Hl. R.)

DECALOGUE (in patristic Gr. ἡ δεκάλογος, *sc.* βίβλος or νομοθεσία), another name for the biblical *Ten Commandments*, in Hebrew the *Ten Words* (Deut. iv. 13, x. 4; Ex. xxxiv. 28), written by God on the two tables of stone (Ex. xxiv. 12, xxxii. 16), the so-called *Tables of the Revelation* (E.V. “tables of testimony,” Ex. xxxiv. 29), or *Tables of the Covenant* (Deut. ix. 9, 11, 15). These tables were broken by Moses (Ex. xxxii. 19), and two new ones were hewn (xxxiv. 1), and upon them were written the words of the covenant by Moses (xxxiv. 27 sqq.) or, according to another view, by God himself (Deut. iv. 13, ix. 10). They were deposited in the Ark (Ex. xxv. 21; 1 Kings viii. 9). In Deuteronomy the inscription on these tables, which is briefly called the covenant (iv. 13), is expressly identified with the words spoken by Jehovah (Yahweh) out of the midst of the fire at Mt. Sinai or Horeb (according to the Deuteronomic tradition), in the ears of the whole people on the “day of the assembly,” and rehearsed in v. 6-21. In the narrative of Exodus the relation of the “ten words” of xxxiv. to the words spoken from Sinai, xx. 2-17, is not so clearly indicated, and it is generally agreed that the Pentateuch presents divergent and irreconcilable views of the Sinaitic covenant.

As regards the Decalogue, as usually understood, and embodied in the parallel passages in Ex. xx. and Deut. v., certain preliminary points of detail have to be noticed. The variations in the parallel texts are partly verbal, partly stylistic (*e.g.* “Remember the Sabbath day,” Ex.; but “observe,” &c., Deut.), and partly consist of amplifications or divergent explanations. Thus the reason assigned for the institution of the Sabbath in Exodus is drawn from the creation, and agrees with Gen. ii. 3. In Deuteronomy the command is based on the duty of humanity to servants and the memory of Egyptian bondage. Again, in the tenth commandment, as given in Exodus, “house” means house and household, including the wife and all the particulars which are enumerated in ver. 17. In Deuteronomy, “Thou shalt not covet thy neighbour’s wife,” comes first, and “house” following in association with field is to be taken in the literal restricted sense, and another verb (“thou shalt not desire”) is used.

The construction of the second commandment in the Hebrew text is disputed, but the most natural sense seems to be, “Thou shalt not make unto thee a graven image; (and) to no visible shape in heaven, &c., shalt thou bow down, &c.” The third commandment might be rendered, “Thou shalt not utter the name of the Lord thy God vainly,” but it is possible that the meaning is that Yahweh’s name is not to be used for purposes of sorcery.

The order of the commandments relating to murder, adultery and stealing varies in the Vatican text of the Septuagint, viz. adultery, stealing, murder, in Ex.; adultery, murder, stealing, in Deut. The latter is supported by several passages in the New Testament (Rom. xiii. 9; Mark x. 19, A.V.; Luke xviii. 20; contrast Matt. xix. 18), and by the “Nash Papyrus.”[1] It may be added that the double system of accentuation of the Decalogue in the Hebrew Bible seems to preserve traces of the ancient uncertainty concerning the numeration.

Divisions of the Decalogue.—The division current in England and Scotland, and generally among the Reformed (Calvinistic) churches and in the Orthodox Eastern Church, is known as the Philonic division (Philo, *de Decalogo*, §12). It is sometimes called by the name of Origen, who adopts it in his *Homilies on Exodus*. On this scheme the preface, Ex. xx. 2, has been usually taken as part of the first commandment. The Church of Rome and the Lutherans adopt the Augustinian division (Aug., *Quaest. super Exod.*, lxxi.), combining into one the first and second commandments of Philo, and splitting his tenth commandment into two. To gain a clear distinction between the ninth and tenth commandments on this scheme it has usually been felt to be necessary to follow the Deuteronomic text, and make the ninth commandment, Thou shalt not covet thy neighbour’s wife.[2] As few scholars will now claim priority for the text of Deuteronomy, this division may be viewed as exploded. But there is a third scheme (the Talmudic) still current among the Jews, and not unknown to early Christian writers, which is still a rival of the Philonic view, though less satisfactory. Here the preface, Ex. xx. 2, is taken as the first “word,” and the second embraces verses 3-6.

See further Nestle, *Expository Times* (1897), p. 427. The decision between Philo and the Talmud must turn on two questions. Can we take the preface as a separate “word”? And can we regard the prohibition of polytheism and the prohibition of idolatry as one commandment? Now, though the Hebrew certainly speaks of ten “words,” not of ten “precepts,” it is most unlikely that the first word can be different in character from those that follow. But the statement “I am the Lord thy God” is either no precept at all, or only enjoins by implication what is expressly commanded in the words “Thou shalt have no other gods before me.” Thus to take the preface as a distinct word is not reasonable unless there are cogent grounds for uniting the commandments against polytheism and idolatry. But that is far from being the case. The first precept of the Philonic scheme enjoins monolatry, the second expresses God’s spiritual and transcendental nature. Accordingly Kuenen does not deny that the prohibition of images contains an element additional to the precept of monolatry, but, following De Goeje, regards the words from “thou shalt not make unto thyself” down to “the waters under the earth” as a later insertion in the original Decalogue. Unless this can be made out, the Philonic scheme is clearly best, and as such it is now accepted by most scholars.

How were the ten words disposed on the two tables? The natural arrangement (which is assumed by Philo and Josephus) would be five and five. And this, as Philo recognized, is a division appropriate to the sense of the precepts; for antiquity did not look on piety towards parents as a mere precept of probity, part of one's duty towards one's neighbour. The authority of parents and rulers is viewed in the Old Testament as a delegated divine authority, and the violation of it is akin to blasphemy (cf. Ex. xxi. 17 and Lev. xx. 9 with Lev. xxiv. 15, 16, and note the formula of treason, 1 Kings xxi. 13).

We have thus five precepts of piety on the first table, and five of probity, in negative form, on the second, an arrangement which is accepted by the best recent writers. But the current view of the Western Church since Augustine has been that the precept to honour parents heads the second table. The only argument of weight in favour of this view is that it makes the amount of writing on the two tables less unequal, while we know that the second table as well as the first was written on both sides (Ex. xxxii. 15). But we shall presently see that there may be another way out of this difficulty.

Date.—It is much disputed what the original compass of the Decalogue was. Did the whole text of Ex. xx. 2-17 stand on the tables of stone? The answer to this question must start from the reason annexed to the fourth commandment, which is different in Deuteronomy. But the express words "and he added no more," in Deut. v. 22, show that there is no conscious omission by the Deuteronomic speaker of part of the original Decalogue, which cannot therefore have included the reason annexed in Exodus. On the other hand the reason annexed in Deuteronomy is rather a parenetic addition than an original element dropped in Exodus. Thus the original fourth commandment was simply "Remember the Sabbath day to keep it holy."[3] When this is granted it must appear not improbable that the elucidations of other commandments may not have stood on the tables, and that Nos. 6-9 have survived in their original form. Thus in the second commandment, "Thou shalt not bow down to any visible form," &c., is a sort of explanatory addition to the precept "Thou shalt not make unto thee a graven image." And so the promise attached to the fifth commandment was probably not on the tables, and the tenth commandment may have simply been, "Thou shalt not covet thy neighbour's house," which includes all that is expressed in the following clauses. Such a view gets over the difficulty arising from the unequal length of the two halves of the Decalogue.

It is quite another question whether there is any idea in the Decalogue which can be as old as Moses. It is urged by many critics that Moses cannot have prohibited the worship of Yahweh by images; for the subsequent history shows us a descendant of Moses as priest in the idolatrous sanctuary of Dan. There were teraphim in David's house, and the worship of Yahweh under the image of a calf was the state religion of the kingdom of Ephraim. Even Moses himself is said to have made a brazen serpent which, down to Hezekiah's time, continued to be worshipped at Jerusalem. It is argued from these facts that image-worship went on unchallenged, and that this would not have been possible had Moses forbidden it. The argument is supported by others of great cogency. Although the literary problems of the chapters which narrate the law-giving on Mt. Sinai are extremely intricate, it is generally agreed that Ex. xx. cannot be ascribed to the oldest source, and if, in accordance with many critics, this chapter is ascribed to the Elohist or Ephraimite school, its incorporation can scarcely be older than the middle of the 8th century, and is probably later. With this, the condemnation of adultery in Gen. xx. 1-17 (contrast xii. 10-20, xxvi. 6-11) is in harmony, and the prohibition of the worship of the heavenly bodies is aimed at a form of idolatry which is frequently alluded to in the times of the later kings. The lofty ethics (*e.g.* tenth commandment) is in itself no *sound* criterion, whilst the external form of the laws, though characteristic of later codes, need not be taken as evidence of importance. But the general result of a study of the Decalogue as a whole, in connexion with Israelite political history and religion, strongly supports, in fact demands, a post-Mosaic origin, and modern criticism is chiefly divided only as to the approximate date to which it is to be ascribed. The time of Manasseh (cf. especially its contact with Micah vi. 6-8) has found many adherents, but an earlier period, about 750 B.C. (time of Amos and Hosea), is often held to satisfy the main conditions; the former, however, is probably nearer the mark.

The Decalogue of Exodus xxxiv.—In the book of Exodus the words written on the tables of stone are nowhere expressly identified with the ten commandments of chap. xx. In xxv. 16, xxxi. 18, xxxii. 15, we simply read of "the testimony" inscribed on the tables, and it seems to be assumed that its contents must be already known to the reader. The expression "ten words" first occurs in xxxiv. 28, in a passage which relates the restoration of the tables after they had been broken. But these "ten words" are called "the words of the covenant," and so can hardly be different from the words mentioned in the preceding verse as those in accordance wherewith the covenant was made with Israel. And again, the words of ver. 27 are necessarily the commandments which immediately precede in vv. 12-26. Accordingly many recent critics have sought to show that Ex. xxxiv. 12-26 contains just ten precepts forming a second decalogue.[4]

These consist not of precepts of social morality, but of several laws of religious observance closely corresponding to the religious and ritual precepts of Ex. xxi.-xxiii. The number ten is not clearly made out, and the individual precepts are somewhat variously assigned. They prohibit (1) the worship of other gods, (2) the making of molten images; they ordain (3) the observance of the feast of unleavened bread, (4) the feast of weeks, (5) the feast of ingathering at the end of the year, and (6) the seventh-day rest; to Yahweh belong (7) the firstlings, and (8) the first-fruits of the land; they forbid also (9) the offering of the blood of sacrifice with leaven, (10) the leaving-over of the fat of a feast until the morning, and (11) the seething of a kid in its mother's milk. This scheme ignores the command to appear thrice in the year before Yahweh which recapitulates Nos. 3-5, and the decade is obtained by omitting No. 6, which some hold to be out of place. Others include "none shall appear before me empty-handed" (xxxiv. 20), and unite Nos. 4-5, 9 and 10. C. F. Kent (*Beginnings of Heb. Hist.* pp. 183 sqq.) obtains a decalogue from scattered precepts in Ex. xx.-xxiii., which corresponds with Nos. 2, 7, 6, 3 and 5 (in one), 9 and 10 (in one), 11 above, and adds (*a*) the building of an altar of earth (xx. 24), (*b*) offering from the harvest and wine-press (xxii. 29), (*c*) firstlings of animals (xxii. 29 sqq.; cf. No. 7, and xxxiv. 19); (*d*) prohibition against eating torn flesh (xxii. 31).[5] The so-called Yahwist Decalogue in xxxiv. presupposes a rather more primitive stage in society, partly nomadic and partly agricultural; No. 6 is suitable only for agriculturists and cannot have originated among nomads. The whole may be summed up in a sentence:—"Worship Yahweh and Yahweh alone, without images, let the worship be simple and in accord with the old usage; forbear to introduce the practices of your Canaanitish neighbours"

(Harper). It would seem to represent more precisely a Judaean standpoint (cf. the simpler customs of the Rechabites, *q.v.*).

If such a system of precepts was ever viewed as the basis of the covenant with Israel, it must belong to a far earlier stage of religious development than that of Ex. xx. This is recognized by Wellhausen, who says that our decalogue stands to that of Ex. xxxiv. as Amos stood to his contemporaries, whose whole religion lay in the observance of sacred feasts. To those accustomed to look on the Ten Words written on the tables of stone as the very foundation of the Mosaic law, it is hard to realize that in ancient Israel there were two opinions as to what these "Words" were. The hypothesis that Ex. xxxiv. 10-26 originally stood in a different connexion, and was misplaced at some stage in the redaction of the Hexateuch, does not help us, since it would still have to be admitted that the editor to whom we owed the present form of the chapter identified this little code of religious observances with the Ten Words. Were this the case the editor, to quote Wellhausen, "introduced the most serious internal contradiction found in the Old Testament."[6]

The Decalogue in Christian Theology.—Following the New Testament, in which the "commandments" summed up in the law of love are identified with the precepts of the Decalogue (Mark x. 19; Rom. xiii. 9; cf. Mark xii. 28 ff.), the ancient Church emphasized the permanent obligation of the ten commandments as a summary of *natural* in contradistinction to *ceremonial* precepts, though the observance of the Sabbath was to be taken in a spiritual sense (Augustine, *De spiritu et litera*, xiv.; Jerome, *De celebratione Paschae*). The medieval theologians followed in the same line, recognizing all the precepts of the Decalogue as moral precepts *de lege naturae*, though the law of the Sabbath is not of the law of nature, in so far as it prescribes a determinate day of rest (Thomas, *summa*, I^{ma} II^{dae}, qu. c. art. 3; Duns, *Super sententias*, lib. iii. dist. 37). The most important medieval exposition of the Decalogue is that of Nicolaus de Lyra; and the 15th century, in which the Decalogue acquired special importance in the confessional, was prolific in treatises on the subject (Antoninus of Florence, Gerson, &c.).

Important theological controversies on the Decalogue begin with the Reformation. The question between the Lutheran (Augustinian) and Reformed (Philonic) division of the ten commandments was mixed up with controversy as to the legitimacy of sacred images not designed to be worshipped. The Reformed theologians took the stricter view. The identity of the Decalogue with the eternal law of nature was maintained in both churches, but it was an open question whether the Decalogue, as such (that is, as a law given by Moses to the Israelites), is of perpetual obligation. The Socinians, on the other hand, regarded the Decalogue as abrogated by the more perfect law of Christ; and this view, especially in the shape that the Decalogue is a civil and not a moral law (J. D. Michaelis), was the current one in the period of 18th-century rationalism. The distinction of a permanent and a transitory element in the law of the Sabbath is found, not only in Luther and Melanchthon, but in Calvin and other theologians of the Reformed church. The main controversy which arose on the basis of this distinction was whether the prescription of one day in seven is of permanent obligation. It was admitted that such obligation must be not natural but positive; but it was argued by the stricter Calvinistic divines that the proportion of one in seven is agreeable to nature, based on the order of creation in six days, and in no way specially connected with anything Jewish. Hence it was regarded as a *universal positive* law of God. But those who maintained the opposite view were not excluded from the number of the orthodox. The laxer conception found a place in the Cocceian school.

LITERATURE.—Geffcken, *Über die verschiedenen Eintheilungen des Dekalogs und den Einfluss derselben auf den Cultus*; W. Robertson Smith, *Old Test. Jew. Church*, pp. 331-345, where his earlier views (1877) in the *Ency. Brit.* are largely modified (cf. also *Eng. Hist. Rev.* (1888) p. 352); Montefiore, *Hibbert Lectures* (1892), Appendix I; W. R. Harper, *Internat. Crit. Comm. on Amos and Hosea*, pp. 58-64 (on the position of the Decalogue in early pre-prophetic religion of Israel); C. A. Briggs, *Higher Criticism of Hexat.*^{2} pp. 189-210; see also the references under EXODUS.

(W. R. S.; S. A. C.)

1 A Hebrew fragment probably of the 2nd century A.D., in the University Library, Cambridge, containing the Decalogue with several variant readings; see S. A. Cook, *Proceed. Soc. Bibl. Archaeology* (1903), pp. 34-56; F. C. Burkitt, *Jewish Quarterly Review* (1903), pp. 392-408; N. Peters, *D. älteste Abschrift d. zehn Gebote* (1905).

2 So, for example, Augustine, l.c., Thomas, *Summa* (*Prima Secundae*, qu. c. art. 4), and recently Sonntag and Kurtz. Purely arbitrary is the idea of Lutheran writers (Gerhard, Loc. xiii. § 46) that the ninth commandment forbids *concupiscentia actualis*, the tenth *conc. originalis*.

3 It is generally assumed that the addition in Exodus is from a hand akin to Gen. ii. 2 sqq.; Ex. xxxi. 17 (P.).

4 So Hitzig (*Ostern und Pfingsten im zweiten Dekalog*, Heidelberg, 1838), independently of a previous suggestion of Goethe in 1783, who in turn appears to have been anticipated by an early Greek writer (Nestle, *Zeit. für alt-test. Wissenschaft* (1904), pp. 134 sqq.).

5 See also W. E. Barnes, *Journ. Theol. Stud.* (1905), pp. 557-563.

6 The last three sentences of this paragraph are taken almost bodily from Robertson Smith's later views (*Old Testament in the Jewish Church*^{2}, pp. 335 seq.).

DE CAMP, JOSEPH (1858-), American portrait and figure painter, was born in Cincinnati, Ohio, in 1858. He was a pupil of Frank Duveneck and of the Royal Academy of Munich; became a member of the society of Ten American Painters, and a teacher in the schools of the Pennsylvania Academy of Fine Arts, Philadelphia, and the Boston Museum of Fine Arts; and painted important mural decorations in the Philadelphia city hall.

DECAMPS, ALEXANDRE GABRIEL (1803-1860), French painter, was born in Paris on the 3rd of March 1803. In his youth he travelled in the East, and reproduced Oriental life and scenery with a bold fidelity to nature that made his works the puzzle of conventional critics. His powers, however, soon came to be recognized, and he was ranked along with Delacroix and Vernet as one of the leaders of the French school. At the Paris Exhibition of 1855 he received the grand or council medal. Most of his life was passed in the neighbourhood of Paris. He was passionately fond of animals, especially dogs, and indulged in all kinds of field sports. He died on the 22nd of August 1860 in consequence of being thrown from a vicious horse while hunting at Fontainebleau. The style of Decamps was characteristically and intensely French. It was marked by vivid dramatic conception, by a manipulation bold and rapid, sometimes even to roughness, and especially by original and startling use of decided contrasts of colour and of light and shade. His subjects embraced an unusually wide range. He availed himself of his travels in the East in dealing with scenes from Scripture history, which he was probably the first of European painters to represent with their true and natural local background. Of this class were his “Joseph sold by his Brethren,” “Moses taken from the Nile,” and his scenes from the life of Samson, nine vigorous sketches in charcoal and white. Perhaps the most impressive of his historical pictures is his “Defeat of the Cimbri,” representing with wonderful skill the conflict between a horde of barbarians and a disciplined army. Decamps produced a number of genre pictures, chiefly of scenes from French and Algerine domestic life, the most marked feature of which is humour. The same characteristic attaches to most of his numerous animal paintings. He painted dogs, horses, &c., with great fidelity and sympathy; but his favourite subject was monkeys, which he depicted in various studies and sketches with a grotesque humour that could scarcely be surpassed. Probably the best known of all his works is “The Monkey Connoisseurs,” a clever satire of the jury of the French Academy of Painting, which had rejected several of his earlier works on account of their divergence from any known standard. The pictures and sketches of Decamps were first made familiar to the English public through the lithographs of Eugène le Roux.

See Moreau’s *Decamps et son œuvre* (Paris, 1869).

DECAPOLIS, a league of ten cities (δέκα πόλεις) with their surrounding district, situated with one exception on the eastern side of the upper Jordan and the Sea of Tiberias. Being essentially a confederation of *cities* it is impossible precisely to fix Decapolis as a *region* with definite boundaries. The names of the original ten cities are given by Pliny; these are as follows: Damascus, Philadelphia, Raphana, Scythopolis (= Beth-Shan, now *Beisan*, west of Jordan), Gadara, Hippos, Dion, Pella, Gerasa and Kanatha. Of these Damascus alone retains its importance. Scythopolis (as represented by the village of Beisan) is still inhabited; the ruins of Pella, Gerasa and Kanatha survive, but the other sites are unknown or disputed. Scythopolis, being in command of the communications with the sea and the Greek cities on the coast, was the most important member of the league. The league subsequently received additions and some of the original ten dropped out. In Ptolemy’s enumeration Raphana has no place, and nine, such as Kapitolias, Edrei, Bosra, &c., are added. The purpose of the league was no doubt mutual defence against the marauding Bedouin tribes that surrounded them. These were hardly if at all checked by the Semitic kinglings to whom the Romans delegated the government of eastern Palestine.

It was probably soon after Pompey’s campaign in 64-63 B.C. that the Decapolis league took shape. The cities comprising it were united by the main roads on which they lay, their respective spheres of influence touching, if not overlapping, one another. A constant communication was maintained with the Mediterranean ports and with Greece, and there was a vigorous municipal life which found expression in literature, in athletic contests, and in a thriving commerce, thus carrying a truly Hellenic influence into Perea and Galilee. From Josephus we learn that the cities were severally subject to the governor of Syria and taxed for imperial purposes; some of them afterwards came under Herod’s jurisdiction, but reserved the substantial rights granted them by Pompey.

The best account is in G. A. Smith’s *Historical Geography of the Holy Land*, chap. xxviii.

(R. A. S. M.)

DECASTYLE (Gr. δέκα, ten, and στῦλος, column), the architectural term given to a temple where the front portico has ten columns; as in the temple of Apollo Didymaeus at Miletus, and the portico of University College, London. (See Temple.)

DECATUR, STEPHEN (1779-1820), American naval commander, was born at Sinnepuxent, Maryland, on the 5th of January 1779, and entered the United States navy as a midshipman in 1798. He was promoted lieutenant a year later, and in that rank saw some service in the short war with France. In 1803 he was in command of the “Enterprise,” which formed part of Commodore Preble’s squadron in the Mediterranean, and in February 1804 led a daring expedition into the harbour of Tripoli for the purpose of burning the U.S. frigate “Philadelphia” which had fallen into Tripolitan hands. He succeeded in his purpose and made his

escape under the fire of the batteries with a loss of only one man wounded. This brilliant exploit earned him his captain's commission and a sword of honour from Congress. Decatur was subsequently engaged in all the attacks on Tripoli between 1804 and 1805. In the War of 1812 his ship the "United States" captured H.M.S. "Macedonian" after a desperate fight, and in 1813 he was appointed commodore to command a squadron in New York harbour, which was soon blockaded by the British. In an attempt to break out in February 1815 Decatur's flagship the "President" was cut off and after a spirited fight forced to surrender to a superior force. Subsequently he commanded in the Mediterranean against the corsairs of Algiers, Tunis and Tripoli with great success. On his return he was made a navy commissioner (November 1815), an office which he held until his death, which took place in a duel with Commodore James Barron at Bladensburg, Md., on the 22nd of March 1820.

See Mackenzie, *Life of Decatur* (Boston, 1846).

DECATUR, a city and the county-seat of Macon county, Illinois, U.S.A., in the central part of the state, near the Sangamon river, about 39 m. E. of Springfield. Pop. (1890) 16,841; (1900) 20,754, of whom 1939 were foreign-born; (1910 census) 31,140. Decatur is served by the Cincinnati, Hamilton & Dayton, the Illinois Central, the Wabash (which maintains car shops here), and the Vandalia railways, and is connected with Danville, Saint Louis, Springfield, Peoria, Bloomington and Champaign by the Illinois Traction System (electric). Decatur has three large parks and a public library; and S.E. of Fairview Park, with a campus of 35 acres, is the James Millikin University (co-educational; Cumberland Presbyterian), founded in 1901 by James Millikin, and opened in 1903. The university comprises schools of liberal arts, engineering (mechanical, electrical, and civil), domestic economy, fine and applied arts, commerce and finance, library science, pedagogy, music, and a preparatory school; in 1907-1908 it had 936 students, 440 being in the school of music. Among the city's manufactures are iron, brass castings, agricultural implements, flour, Indian corn products, soda fountains, plumbers' supplies, coffins and caskets, bar and store fixtures, gas and electric light fixtures, street cars, and car trucks. The value of the city's factory products increased from $5,133,677 in 1900 to $8,667,302 in 1905, or 68.8%. The city is also an important shipping point for agricultural products (especially grain), and for coal taken from the two mines in the city and from mines in the surrounding country. The first settlement in Decatur was made in 1829, and the place was incorporated in 1836. On the 22nd of February 1856 a convention of Illinois editors met at Decatur to determine upon a policy of opposition to the Kansas-Nebraska Bill. They called a state convention, which met at Bloomington, and which is considered to have taken the first step toward founding the Republican party in Illinois.

DECAZES, ÉLIE, Duc (1780-1860), French statesman, was born at Saint Martin de Laye in the Gironde. He studied law, became a judge in the tribunal of the Seine in 1806, was attached to the cabinet of Louis Bonaparte in 1807, and was counsel to the court of appeal at Paris in 1811. Immediately upon the fall of the empire he declared himself a Royalist, and remained faithful to the Bourbons through the Hundred Days. He made the personal acquaintance of Louis XVIII. during that period through Baron Louis, and the king rewarded his energy and tact by appointing him prefect of police at Paris on the 7th of July 1815. His marked success in that difficult position won for him the ministry of police, in succession to Fouché, on the 24th of September. In the interval he had been elected deputy for the Seine (August 1815) and both as deputy and as minister he led the moderate Royalists. His formula was "to royalize France and to nationalize the monarchy." The Moderates were in a minority in the chamber of 1815, but Decazes persuaded Louis XVIII. to dissolve the house, and the elections of October 1816 gave them a majority. During the next four years Decazes was called upon to play the leading rôle in the government. At first, as minister of police he had to suppress the insurrections provoked by the ultra-Royalists (the White Terror); then, after the resignation of the duc de Richelieu, he took the actual direction of the ministry, although the nominal president was General J. J. P. A. Dessolle (1767-1828). He held at the same time the portfolio of the interior. The cabinet, in which Baron Louis was minister of finance, and Marshal Gouvion Saint Cyr remained minister of war, was entirely Liberal; and its first act was to suppress the ministry of police, as Decazes held that it was incompatible with the régime of liberty. His reforms met with the strong hostility of the Chamber of Peers, where the ultra-Royalists were in a majority, and to overcome it he got the king to create sixty new Liberal peers. He then passed the laws on the press, suppressing the censorship. By reorganization of the finances, the protection of industry and the carrying out of great public works, France regained its economic prosperity, and the ministry became popular. But the powers of the Grand Alliance had been watching the growth of Liberalism in France with increasing anxiety. Metternich especially ascribed this mainly to the "weakness" of the ministry, and when in 1819 the political elections still further illustrated this trend, notably by the election of the celebrated Abbé Grégoire, it began to be debated whether the time had not come to put in force the terms of the secret treaty of Aix-la-Chapelle. It was this threat of foreign intervention, rather than the clamour of the "Ultras," that forced Louis XVIII. to urge a change in the electoral law that should render such a "scandal" as Grégoire's election impossible for the future. Dessolle and Louis, refusing to embark on this policy, now resigned; and Decazes became head of the new ministry, as president of the council (November 1819). But the exclusion of Grégoire from the chamber and the changes in the franchise embittered the Radicals without conciliating the "Ultras." The news of the revolution in Spain in January 1820 added fuel to their fury; it was the foolish and criminal policy of the royal favourite that had once more unchained the demon of revolution. Decazes was denounced as the new Sejanus, the modern Catiline; and when, on the 13th of February, the duke of Berry was murdered, clamorous tongues loudly accused him of

being an accomplice in the crime. Decazes, indeed, foreseeing the storm, at once placed his resignation in the king's hands. Louis at first refused. "They will attack," he exclaimed, "not your system, my dear son, but mine." But in the end he was forced to yield to the importunity of his family (February 17th); and Decazes, raised to the rank of duke, passed into honourable exile as ambassador to Great Britain.

This ended Decazes's meteoric career of greatness. In December 1821 he returned to sit in the House of Peers, when he continued to maintain his Liberal opinions. After 1830 he adhered to the monarchy of July, but after 1848 he remained in retirement. He had organized in 1826 a society to develop the coal and iron of the Aveyron, and the name of Decazeville was given in 1829 to the principal centre of the industry. He died on the 24th of October 1860.

His son, Louis Charles Élie Decazes, duc de Glücksberg (1819-1886), was born at Paris, and entered the diplomatic career. He became minister plenipotentiary at Madrid and at Lisbon, but the revolution of 1848 caused him to withdraw into private life, from which he did not emerge until in 1871 he was elected deputy to the National Assembly by the Gironde. There he sat in the right centre among the Orleanists, and was chosen by the duc de Broglie as minister of foreign affairs in November 1873. He voted with the Orleanists the "Constitutional Laws" of 1875, and approved of MacMahon's parliamentary *coup d'état* on the 16th of May 1877. He was re-elected deputy in October 1877 by the arrondissement of Puget-Théniers, but his election was annulled by the chamber, and he was not re-elected. He died on the 16th of September 1886.

On the Duc Decazes see E. Daudet, *Louis XVIII. et le duc Decazes* (1899), and his "L'ambassade du duc Decazes" in the *Revue des deux mondes* for 1899.

DECAZEVILLE, a town of south-central France, in the department of Aveyron, 34 m. N.W. of Rodez by the Orleans railway. Pop. (1906) 9749. It possesses iron mines and is the centre of the coal-fields of the Aveyron, which supply the ironworks established by the Duc Decazes, minister of Louis XVIII. A statue commemorates the founder.

DECCAN (Sans. *Dakshina*, "the South"), a name applied, according to Hindu geographers, to the whole of the territories in India situated to the south of the river Nerbudda. In its more modern acceptation, however, it is sometimes understood as comprising only the country lying between that river and the Kistna, the latter having for a long period formed the southern boundary of the Mahommedan empire of Delhi. Assigning it the more extended of these limits, it comprehends the whole of the Indian peninsula, and in this view the mountainous system, consisting of the Eastern and Western Ghats, constitutes the most striking feature of the Deccan. These two mountain ranges unite at their northern extremities with the Vindhya chain of mountains, and thus is formed a vast triangle supporting at a considerable elevation the expanse of table-land which stretches from Cape Comorin to the valley of the Nerbudda. The surface of this table-land slopes from west to east, as indicated by the direction of the drainage of the country,—the great rivers, the Cauvery, Godavari, Kistna and Pennar, though deriving their sources from the base of the Western Ghats, all finding their way into the Bay of Bengal through fissures in the Eastern Ghats.

History.—The detailed and authentic history of the Deccan only begins with the 13th century A.D. Of the early history the main facts established are the Aryan invasion (*c.* 700 B.C.), the growth of the Maurya empire (250 B.C.) and the invasion (A.D. 100) of the Scythic tribes known as the Sakas, Pahlavas and Yavanas, which led to the establishment of the power of the Kshaharata satraps in western India. In addition to this, modern study of monuments and inscriptions has recovered the names, and to a certain extent the records, of a succession of dynasties ruling in the Deccan; of these the most conspicuous are the Cholas, the Andhras or Satavahanas, the Chalukyas, the Rashtrakutas and the Yadavas of Devagiri (Deogiri). (See India: *History*; Bombay; Presidency: *History*; Inscriptions: *Indian*.) In 1294 Ala-ud-Din Khilji, emperor of Delhi, invaded the Deccan, stormed Devagiri, and reduced the Yadava rajas of Maharashtra to the position of tributary princes (see Daulatabad), then proceeding southward overran Telingana and Carnata (1294-1300). With this event the continuous history of the Deccan begins. In 1307, owing to non-payment of tribute, a fresh series of Mussulman incursions began, under Malik Kafur, issuing in the final ruin of the Yadava power; and in 1338 the reduction of the Deccan was completed by Mahommed ben Tughlak. The imperial sway was, however, of brief duration. Telingana and Carnata speedily reverted to their former masters; and this defection on the part of the Hindu states was followed by a general revolt of the Mussulman governors, resulting in the establishment in 1347 of the independent Mahommedan dynasty of Bahmani, and the consequent withdrawal of the power of Delhi from the territory south of the Nerbudda. In the struggles which ensued, the Hindu kingdom of Telingana fell bit by bit to the Bahmani dynasty, who advanced their frontier to Golconda in 1373, to Warangal in 1421, and to the Bay of Bengal in 1472. On the dissolution of the Bahmani empire (1482), its dominions were distributed into the five Mahommedan states of Golconda, Bijapur, Ahmednagar, Bidar and Berar. To the south of these the great Hindu state of Carnata or Vijayanagar still survived; but this, too, was destroyed, at the battle of Talikota (1565), by a league of the Mahommedan powers. These latter in their turn soon disappeared. Berar had already been annexed by Ahmednagar in 1572, and Bidar was absorbed by Bijapur in 1609. The victories of the Delhi emperors, Akbar, Shah Jahan and Aurangzeb, crushed the rest. Ahmednagar was incorporated in the Mogul empire in 1598, Bijapur in 1686, and Golconda in 1688. The rule of the Delhi emperors in the Deccan did not, however, long survive. In 1706 the Mahrattas acquired the right of levying tribute in southern India, and their principal chief, the Peshwa of Poona, became a practically

independent sovereign. A few years later the emperor's viceroy in Ahmednagar, the nizam-al-mulk, threw off his allegiance and established the seat of an independent government at Hyderabad (1724). The remainder of the imperial possessions in the peninsula were held by chieftains acknowledging the supremacy of one or other of these two potentates. In the sequel, Mysore became the prize of the Mahommedan usurper Hyder Ali. During the contests for power which ensued about the middle of the 18th century between the native chiefs, the French and the English took opposite sides. After a brief course of triumph, the interests of France declined, and a new empire in India was established by the British. Mysore formed one of their earliest conquests in the Deccan. Tanjore and the Carnatic were shortly after annexed to their dominions. In 1818 the forfeited possessions of the Peshwa added to their extent; and these acquisitions, with others which have more recently fallen to the paramount power by cession, conquest or failure of heirs, form a continuous territory stretching from the Nerbudda to Cape Comorin. Its length is upwards of 1000 m., and its extreme breadth exceeds 800. This vast tract comprehends the chief provinces now distributed between the presidencies of Madras and Bombay, together with the native states of Hyderabad and Mysore, and those of Kolhapur, Sawantwari, Travancore, Cochin and the petty possessions of France and Portugal.

See J. D. B. Gribble, *History of the Deccan* (1896); Prof. Bhandarkar, "Early History of the Dekkan" (*Bombay Gazetteer*); Vincent A. Smith, *Early History of India* (2nd ed., Oxford, 1908), chap. xv. "The Kingdoms of the Deccan."

DECELEA (Gr. Δεκελεία), an Attic deme, on the pass which led over the east end of Mt. Parnes towards Oropus and Chalcis. From its position it has a commanding view over the Athenian plain. Its eponymous hero, Decelus, was said to have indicated to the Tyndaridae, Castor and Pollux, the place where Theseus had hidden their sister Helen at Aphidnae; and hence there was a traditional friendship between the Deceleans and the Spartans (Herodotus ix. 73). This tradition, together with the advice of Alcibiades, led the Spartans to fortify Decelea as a basis for permanent occupation in Attica during the later years of the Peloponnesian War, from 413-404 B.C. Its position enabled them to harass the Athenians constantly, and to form a centre for fugitive slaves and other deserters. The royal palace of Tatoi has been built on the site.

See PELOPONNESIAN WAR; also Judeich in Pauly-Wissowa, *Realencyclopädie*.

DECEMBER (Lat. *decem*, ten), the last month of the year. In the Roman calendar, traditionally ascribed to Romulus, the year was divided into ten months, the last of which was called December, or the *tenth* month, and this name, though etymologically incorrect, was retained for the last or twelfth month of the year as now divided. In the Romulian calendar December had thirty days; Numa reduced the number to twenty-nine; Julius Caesar added two days to this, giving the month its present length. The *Saturnalia* occurred in December, which is therefore styled "acceptus geniis" by Ovid (*Fasti*, iii. 58); and this also explains the phrase of Horace "libertate Decembri utere" (*Sat.* ii. 7). Martial applies to the month the epithet *canus* (hoary), and Ovid styles it *gelidus* (frosty) and *fumosus* (smoky). In the reign of Commodus it was temporarily styled *Amazonius*, in honour of the emperor's mistress, whom he had had painted as an Amazon. The Saxons called it *winter-monath*, winter month, and *heligh-monath*, holy month, from the fact that Christmas fell within it. Thus the modern Germans call it *Christmonat*. The 22nd of December is the date of the winter solstice, when the sun reaches the tropic of Capricorn.

DECEMVIRI ("the ten men"), the name applied by the Romans to any official commission of ten. The title was often followed by a statement of the purpose for which the commission was appointed, *e.g. Xviri legibus scribundis, stlitibus judicandis, sacris faciundis*.

I. Apart from such qualification, it signified chiefly the temporary commission which superseded all the ordinary magistrates of the Republic from 451 to 449 B.C., for the purpose of drawing up a code of laws. In 462 B.C. a tribune proposed that the appointment of a commission to draw up a code expressing the legal principles of the administration was necessary to secure for the *plebs* a hold over magisterial caprice. Continued agitation to this effect resulted in an agreement in 452 B.C. between patricians and plebeians that decemvirs should be appointed to draw up a code, that during their tenure of office all other magistracies should be in abeyance, that they should not be subject to appeal, but that they should be bound to maintain the laws which guaranteed by religious sanctions the rights of the plebs. The first board of decemvirs (apparently consisting wholly of patricians) was appointed to hold office during 451 B.C.; and the chief man among them was Appius Claudius. Livy (iii. 32) says that only patricians were eligible. Mommsen, however, held that plebeians were legally eligible, though none were actually appointed for 451. The decemvirs ruled with singular moderation, and submitted to the *Comitia Centuriata* a code of laws in ten headings, which was passed. So popular were the decemvirs that another board of ten was appointed for the following year, some of whom, if the extant list of names is correct, were certainly plebeians. These added two more to the ten laws of their predecessors, thus completing the Laws of the Twelve Tables (see ROMAN LAW). But their rule

then became violent and tyrannical, and they fell before the fury of the *plebs*, though for some reason, not easily understood, they continued to have the support of the patricians. They were forced to abdicate (449 B.C.), and the ordinary magistrates were restored.

II. The judicial board of decemvirs (*stlitibus judicandis*) formed a civil court of ancient origin concerned mainly with questions bearing on the status of individuals. They were originally a body of jurors which gave a verdict under the presidency of the praetor (*q.v.*), but eventually became annual minor magistrates of the Republic, elected by the *Comitia Tributa*.

III. The priestly board of decemvirs (*sacris faciundis*) was an outcome of the claim of the *plebs* to a share in the administration of the state religion. Five of the decemvirs were patricians, and five plebeians. They were first appointed in 367 B.C. instead of the patrician *duumviri* who had hitherto performed these duties. The board was increased to fifteen in the last century of the Republic. Its chief function was the care of the Sibylline books, and the celebration of the games of Apollo (Livy x. 8) and the Secular Games (Tac. *Ann.* xi. 11).

IV. Decemvirs were also appointed from time to time to control the distribution of the public land (*agris dandis adsignandis*; see AGRARIAN LAWS).

BIBLIOGRAPHY.—B. G. Niebuhr, *History of Rome* (Eng. trans.), ii. 309 et seq. (Cambridge, 1832); Th. Mommsen, *History of Rome*, bk. ii. c. 2, vol. i. pp. 361 et seq. (Eng. trans., new ed., 1894); *Römisches Staatsrecht*, ii. 605 et seq., 714 (Leipzig, 1887); A. H. J. Greenidge, *Legal Procedure of Cicero's Time*, p. 40 et seq., 263 (Oxford, 1901); J. Muirhead, *Private Law of Rome*, p. 73 et seq. (London, 1899); Pauly-Wissowa, *Realencyclopädie*, iv. 2256 et seq. (Kübler).

(A. M. CL.)

DECHEN, ERNST HEINRICH KARL VON (1800-1889), German geologist, was born in Berlin on the 25th of March 1800, and was educated in the university in that city. He subsequently studied mining in Bochum and Essen, and was in 1820 placed in the mining department of the Prussian state, serving on the staff until 1864, and becoming director in 1841 when he was stationed at Bonn. In early years he made journeys to study the mining systems of other countries, and with this object he visited England and Scotland in company with Karl von Oeynhausen (1797-1865). In the course of his work he paid special attention to the coal-formation of Westphalia and northern Europe generally, and he greatly furthered the progress made in mining and metallurgical works in Rhenish Prussia. He made numerous contributions to geological literature; notably the following:—*Geognostische Umrisse der Rheinländer zwischen Basel und Mainz mit besonderer Rücksicht auf das Vorkommen des Steinsalzes* (with von Oeynhausen and La Roche), 2 vols. (Berlin, 1825); *Geognostische Führer in das Siebengebirge am Rhein* (Bonn, 1861); *Die nutzbaren Mineralien und Gebirgsarten im deutschen Reiche* (1873). But his main work was a geological map of Rhenish Prussia and Westphalia in 35 sheets on the scale of 1 : 80,000, issued with two volumes of explanatory text (1855-1882). He published also a small geological map of Germany (1869). He died at Bonn on the 15th of February 1889.

(H. B. W.)

DECIDUOUS (from Lat. *decidere*, to fall down), a botanical and zoological term for "falling in season," as of petals after flowering, leaves in autumn, the teeth or horns of animals, or the wings of insects.

DECIMAL COINAGE.[1] Any currency in which the various denominations of coin are arranged in multiples or submultiples of ten (Lat. *decem*), with reference to a standard unit, is a decimal system. Thus if the standard unit be 1 the higher coins will be 10, 100, 1000, &c., the lower .1, .01, .001, &c. In a perfect system there would be no breaks or interpolations, but the actual currencies described as "decimal" do not show this rigid symmetry. In France the standard unit—the franc—has the 10 franc and the 100 franc pieces above it; the 10 centime below it; there are also, however, 50 franc, 20 franc, 5 franc, 2 franc pieces as well as 50 and 20 centime ones. Similar irregularities occur in the German and United States coinages, and indeed in all countries in which a decimal system has been established. Popular convenience has compelled this departure from the strict decimal form.

Subject to these practical modifications the leading countries of the world (Great Britain and India are the chief exceptions) have adopted decimal coinage. The United States led the way (1786 and 1792) with the dollar as the unit, and France soon followed (1799 and 1803), her system being extended to the countries of the Latin Union (1865). The German empire (1873), the Scandinavian States (1875), Austria-Hungary (1870, developed in 1892) and Russia (1839 and 1897) are further adherents to the decimal system. The Latin-American countries and Japan (1871) have also adopted it.

In England proposals for decimalizing the coinage have long been under discussion at intervals. Besides the inconvenience of altering the established currency, the difficulty of choosing between the different schemes

propounded has been a considerable obstacle. One plan took the farthing as a base: then 10 farthings = 1 doit (2½d.), 10 doits = 1 florin (2s. 1d.), 10 florins = 1 pound (20s. 10d.). The advantages claimed for this scheme were (1) the preservation of the smaller coins (the penny = 4 farthings); and (2) the avoidance of interference with the smaller retail prices. Its great disadvantage was the destruction of the existing unit of value—the pound—and the consequent disturbance of all accounts. A second proposal would retain the pound as unit and the florin, but would subdivide the latter into 100 "units" (or farthings reduced 4%) and introduce a new coin = 10 units (2.4d.). By it the unit of account would remain as at present, and the shilling (as 50 units) would continue in use. The alteration of the bronze and several silver coins, and the need of readjusting all values and prices expressed in pence, formed the principal difficulties. A third scheme, which was connected with the assimilation of English to French and American money, proposed the establishment of an 8s. gold coin as unit, with the tenpenny or franc and the penny (reduced by 4%) as subdivisions. The new coin would be equivalent to 10 francs or (by an anticipated reduction of the dollar) 2 dollars. None of these plans has gained any great amount of popular support.

For the general question of monetary scales see Money, and for the decimal system in reference to weights and measures see Metric System and Weights and Measures.

(C. F. B.)

1 For "decimal" in general see Arithmetic.

DECIUS, GAIUS MESSIUS QUINTUS TRAJANUS (201-251), Roman emperor, the first of the long succession of distinguished men from the Illyrian provinces, was born at Budalia near Sirmium in lower Pannonia in A.D. 201. About 245 the emperor Philip the Arabian entrusted him with an important command on the Danube, and in 249 (or end of 248), having been sent to put down a revolt of the troops in Moesia and Pannonia, he was forced to assume the imperial dignity. He still protested his loyalty to Philip, but the latter advanced against him and was slain near Verona. During his brief reign Decius was engaged in important operations against the Goths, who crossed the Danube and overran the districts of Moesia and Thrace. The details are obscure, and there is considerable doubt as to the part taken in the campaign by Decius and his son (of the same name) respectively. The Goths were surprised by the emperor while besieging Nicopolis on the Danube; at his approach they crossed the Balkans, and attacked Philippopolis. Decius followed them, but a severe defeat near Beroë made it impossible to save Philippopolis, which fell into the hands of the Goths, who treated the conquered with frightful cruelty. Its commander, Priscus, declared himself emperor under Gothic protection. The siege of Philippopolis had so exhausted the numbers and resources of the Goths, that they offered to surrender their booty and prisoners on condition of being allowed to retire unmolested. But Decius, who had succeeded in surrounding them and hoped to cut off their retreat, refused to entertain their proposals. The final engagement, in which the Goths fought with the courage of despair, took place on swampy ground in the Dobrudja near Abritum (Abrittus) or Forum Trebonii and ended in the defeat and death of Decius and his son. Decius was an excellent soldier, a man of amiable disposition, and a capable administrator, worthy of being classed with the best Romans of the ancient type. The chief blot on his reign was the systematic and authorized persecution of the Christians, which had for its object the restoration of the religion and institutions of ancient Rome. Either as a concession to the senate, or perhaps with the idea of improving public morality, Decius endeavoured to revive the separate office and authority of the censor. The choice was left to the senate, who unanimously selected Valerian (afterwards emperor). But Valerian, well aware of the dangers and difficulties attaching to the office at such a time, declined the responsibility. The invasion of the Goths and the death of Decius put an end to the abortive attempt.

See Aurelius Victor, *De Caesaribus*, 29, *Epit.* 29; Jordanes, *De rebus Geticis*, 18; fragments of Dexippus, in C. W. Müller, *Frag. Hist. Graec.* iii. (1849); Gibbon, *Decline and Fall*, chap. 10; H. Schiller, *Geschichte der römischen Kaiserzeit*, i. (pt. 2), 1883.

DECIZE, a town of central France, in the department of Nièvre, on an island in the Loire, 24 m. S.E. of Nevers by the Paris-Lyon railway. Pop. (1906) 3813. The most important of its buildings is the church of Saint Aré, which dates in part from the 11th and 12th centuries; there are also ruins of a castle of the counts of Nevers. The town has a statue of Guy Coquille, the lawyer and historian, who was born there in 1523. Decize is situated at the starting-point of the Nivernais canal. The coal mine of La Machine, which belongs to the Schneider Company of Le Creusot, lies four miles to the north. The industries of Decize and its suburbs on both banks of the Loire include the working of gypsum and lime, and the manufacture of ceramic products and glass. Trade is in horses from the Morvan, cattle, coal, iron, wood and stone.

Under the name of *Decetia* the place is mentioned by Julius Caesar as a stronghold of the Aedui, and in 52 B.C. was the scene of a meeting of the senate held by him to settle the leadership of the tribe and to reply to his demand for aid against Vercingetorix. In later times it belonged to the counts of Nevers, from whom it obtained a charter of franchise in 1226.

DECKER, SIR MATTHEW, Bart. (1679-1749), English merchant and writer on trade, was born in Amsterdam in 1679. He came to London in 1702 and established himself there as a merchant. He was remarkably successful in his business life, gaining great wealth and having many honours conferred upon him. He was a director of the East India Company, sat in parliament for four years as member for Bishops Castle, and was high sheriff of Surrey in 1729. He was created a baronet by George I. in 1716. Decker's fame as a writer on trade rests on two tracts. The first, *Serious considerations on the several high duties which the Nation in general, as well as Trade in particular, labours under, with a proposal for preventing the removal of goods, discharging the trader from any search, and raising all the Publick Supplies by one single Tax* (1743; name affixed to 7th edition, 1756), proposed to do away with customs duties and substitute a tax upon houses. He also suggested taking the duty off tea and putting instead a licence duty on households wishing to consume it. The second, an *Essay on the Causes of the Decline of the Foreign Trade, consequently of the value of the lands in Britain, and on the means to restore both* (1744), has been attributed to W. Richardson, but internal evidence is strongly in favour of Decker's authorship. He advocates the licence plan in an extended form; urges the repeal of import duties and the abolition of bounties, and, in general, shows himself such a strong supporter of the doctrine of free trade as to rank as one of the most important forerunners of Adam Smith. Decker died on the 18th of March 1749.

DECKER, PIERRE DE (1812-1891), Belgian statesman and author, was educated at a Jesuit school, studied law at Paris, and became a journalist on the staff of the *Revue de Bruxelles*. In 1839 he was elected to the Belgian lower chamber, where he gained a great reputation for oratory. In 1855 he became minister of the interior and prime minister, and attempted, by a combination of the moderate elements of the Catholic and Liberal parties, the impossible task of effecting a settlement of the educational and other questions by which Belgium was distracted. In 1866 he retired from politics and went into business, with disastrous results. He became involved in financial speculations which lost him his good name as well as the greater part of his fortune; and, though he was never proved to have been more than the victim of clever operators, when in 1871 he was appointed by the Catholic cabinet governor of Limburg, the outcry was so great that he resigned the appointment and retired definitively into private life. He died on the 4th of January 1891. Decker, who was a member of the Belgian academy, wrote several historical and other works of value, of which the most notable are *Études historiques et critiques sur les monts-de-piété en Belgique* (Brussels, 1844); *De l'influence du libre arbitre de l'homme sur les faits sociaux* (1848); *L'Esprit de parti et l'esprit national* (1852); *Étude politique sur le vicomte Ch. Vilain XIIII* (1879); *Épisodes de l'hist. de l'art en Belgique* (1883); *Biographie de H. Conscience* (1885).

DECLARATION (from Lat. *declarare*, to make fully clear, *clarus*), formerly, in an action at English law, the first step in pleading—the precise statement of the matter in respect of which the plaintiff sued. It was divided into counts, in each of which a specific cause of action was alleged, in wide and general terms, and the same acts or omissions might be stated in several counts as different causes of actions. Under the system of pleading established by the Judicature Act 1875, the declaration has been superseded by a statement of claim setting forth the facts on which the plaintiff relies. Declarations are now in use only in the mayor's court of London and certain local courts of record, and in those of the United States and the British colonies in which the Common Law system of pleading survives. In the United States a declaration is termed a "complaint," which is the first pleading in an action. It is divided into parts,—the *title* of the court and term; the *venue* or county in which the facts are alleged to have occurred; the *commencement*, which contains a statement of the names of the parties and the character in which they appear; the *statement* of the cause of action; and the *conclusion* or claim for relief. (See Pleading.)

The term is also used in other English legal connexions; *e.g.* the Declaration of Insolvency which, when filed in the Bankruptcy Court by any person unable to pay his debts, amounts to an act of bankruptcy (see Bankruptcy); the Declaration of Title, for which, when a person apprehends an invasion of his title to land, he may, by the Declaration of Title Act 1862, petition the Court of Chancery (see Land Registration); or the Declaration of Trust, whereby a person acknowledges that property, the title of which he holds, belongs to another, for whose use he holds it; by the Statute of Frauds, declarations of trust of land must be evidenced in writing and signed by the party declaring the trust. (See Trusts.) By the Statutory Declarations Act 1835 (which was an act to make provision for the abolition of unnecessary oaths, and to repeal a previous act of the same session on the same subject), various cases were specified in which a solemn declaration was, or might be, substituted for an affidavit. In nearly all civilized countries an affirmation is now permitted to those who object to take an oath or upon whose conscience an oath is not binding. (See Affidavit; Oath.)

An exceptional position in law is accorded to a Dying or Deathbed Declaration. As a general rule, hearsay evidence is excluded on a criminal charge, but where the charge is one of homicide it is the practice to admit dying declarations of the deceased with respect to the cause of his death. But before such declarations can be admitted in evidence against a prisoner, it must be proved that the deceased when making the declaration had given up all hope of recovery. Unsworn declarations as to family matters, *e.g.* as to pedigree, may also be admitted as evidence, as well as declarations made by deceased persons in the course of their duty. (See Evidence.)

DECLARATION OF PARIS, a statement of principles of international law adopted at the conclusion (16th of April 1856) of the negotiations for the treaty of Paris at the suggestion of Count Walewski, the French plenipotentiary. The declaration set out that maritime law in time of war had long been the subject of deplorable disputes, that the uncertainty of the rights and duties in respect of it gave rise to differences of opinion between neutrals and belligerents which might occasion serious difficulties and even conflicts, and that it was consequently desirable to agree upon some fixed uniform rules. The plenipotentiaries therefore adopted the four following principles:—

> 1. Privateering is and remains abolished; 2. The neutral flag covers enemy's goods, with the exception of contraband of war; 3. Neutral goods, with the exception of contraband of war, are not liable to capture under the enemy's flag; 4. Blockades, in order to be binding, must be effective, that is to say, maintained by a force sufficient really to prevent access to the coast of the enemy.

They also undertook to bring the declaration to the knowledge of the states which had not taken part in the congress of Paris and to invite them to accede to it. The text of the declaration concluded as follows: —"Convinced that the maxims which they now proclaim cannot but be received with gratitude by the whole world, the undersigned plenipotentiaries doubt not that the efforts of their governments to obtain the general adoption thereof will be crowned with full success."

The declaration is of course binding only on the powers which adopted it or have acceded to it. The majority which adopted it consisted of Great Britain, Austria, France, Prussia, Russia, Sardinia and Turkey. The United States government declined to sign the declaration on the ground that, not possessing a great navy, they would be obliged in time of war to rely largely upon merchant ships commissioned as war vessels, and that therefore the abolition of privateering would be entirely in favour of European powers, whose large navies rendered them practically independent of such aid. All other maritime states acceded to the declaration except Spain, Mexico[1] and Venezuela.

Although the United States and Spain were not parties to the declaration, both, during the Spanish-American War, observed its principles. The Spanish government, however, expressly gave notice that it reserved its right to issue letters of marque. At the same time both belligerents organized services of auxiliary cruisers composed of merchant ships under the command of naval officers. In how far this might operate as a veiled revival of the forbidden practice has now ceased to be a matter of much importance, the Hague Conference having adopted a series of rules on the subject which may be said to interpret the first of the four principles of the declaration with such precision as to take its place.

The New Convention on the subject (October 18th, 1907) sets out that, in view of the incorporation in time of war of merchant vessels in combatant fleets, it is desirable to define the conditions under which this can be effected, that, nevertheless, the contracting powers, not having been able to come to an understanding on the question whether the transformation of a merchant ship into a war vessel may take place on the high sea,[2] are agreed that the question of the place of transformation is in no way affected by the rules adopted, which are as follows:—

> Art. i. No merchant ship transformed into a war vessel can have the rights and obligations attaching to this condition unless it is placed under the direct authority, the immediate control and the responsibility of the power whose flag it carries.
>
> Art. ii. Merchant ships transformed into war vessels must bear the distinctive external signs of war vessels of their nationality.
>
> Art. iii. The officer commanding must be in the service of the state, and properly commissioned by the competent authorities. His name must appear in the list of officers of the combatant fleet.
>
> Art. iv. The crew must be subject to the rules of military discipline.
>
> Art. v. Every merchant ship transformed into a war vessel is bound to conform, in its operation, to the laws and customs of war.
>
> Art. vi. The belligerent who transforms a merchant ship into a war vessel must, as soon as possible, mention this transformation on the list of vessels belonging to its combatant fleet.
>
> Art. vii. The provisions of the present convention are only applicable as among the contracting powers and provided the belligerents are all parties to the convention.

See T. Gibson Bowles, *Declaration of Paris* (London, 1900); Sir T. Barclay, *Problems of International Practice and Diplomacy* (London, 1907), chap. xv.[2].

(T. Ba.)

1 At the 7th plenary sitting of the second Hague Conference (September 7th, 1907) the chiefs of the Spanish and Mexican delegations, M. de Villa Urratia and M. de la Barra, announced the determination of their respective governments to accede to the Declaration of Paris.

2 This relates to the incident in the Russo-Japanese War of the transformation of Russian vessels which had passed through the Dardanelles unarmed.

DECLARATOR, in Scots law, a form of action by which some right of property, or of servitude, or of status, or some inferior right or interest, is sought to be judicially declared.

DECLINATION (from Lat. *declinare*, to decline), in magnetism the angle between true north and magnetic north, *i.e.* the variation between the true meridian and the magnetic meridian. In 1596 at London the angle of declination was 11° E. of N., in 1652 magnetic north was true north, in 1815 the magnetic needle pointed 24½° W. of N., in 1891 18° W., in 1896 17° 56′ W. and in 1906 17° 45′. The angle is gradually diminishing and the declination will in time again be 0°, when it will slowly increase in an easterly direction, the north magnetic pole oscillating slowly around the North Pole. Regular daily changes of declination also occur. Magnetic storms cause irregular variations sometimes of one or two degrees. (See Magnetism, Terrestrial.)

In astronomy the declination is the angular distance, as seen from the earth, of a heavenly body from the celestial equator, thus corresponding with terrestrial latitude.

DECOLOURIZING, in practical chemistry and chemical technology, the removal of coloured impurities from a substance. The agent most frequently used is charcoal, preferably prepared from blood, which when shaken with a coloured solution frequently precipitates the coloured substances leaving the solution clear. Thus the red colour of wines may be removed by filtering the wine through charcoal; the removal of the dark-coloured impurities which arise in the manufacture of sugar may be similarly effected. Other "decolourizers" are sulphurous acid, permanganates and manganates, all of which have received application in the sugar industry.

DECORATED PERIOD, in architecture, the term given by Richman to the second pointed or Gothic style, 1307-1377. It is characterized by its window tracery, geometrical at first and flowing in the later period, owing to the omission of the circles in the tracery of windows, which led to the juxtaposition of the foliations and their pronounced curves of contre-flexure. This flowing or flamboyant tracery was introduced in the first quarter of the century and lasted about fifty years. The arches are generally equilateral, and the mouldings bolder than in the Early English, with less depth in the hollows and with the fillet largely used. The ball flower and a four-leaved flower take the place of the dog-tooth, and the foliage in the capitals is less conventional than in Early English and more flowing, and the diaper patterns in walls are more varied. The principal examples are those of the east end of Lincoln and Carlisle cathedral; the west fronts of York and Lichfield; the crossing of Ely cathedral, including the lantern and three west bays of choir and the Lady Chapel; and Melrose Abbey.

(R. P. S.)

DE COSTA, BENJAMIN FRANKLIN (1831-1904), American clergyman and historical writer, was born in Charlestown, Massachusetts, on the 10th of July 1831. He graduated in 1856 at the Biblical Institute at Concord, New Hampshire (now a part of Boston University), became a minister in the Episcopal Church in 1857, and during the next three years was a rector first at North Adams, and then at Newton Lower Falls, Mass. After serving as chaplain in two Massachusetts regiments during the first two years of the Civil War, he became editor (1863) of *The Christian Times* in New York, and subsequently edited *The Episcopalian* and *The Magazine of American History*. He was rector of the church of St John the Evangelist in New York city from 1881 to 1899, when he resigned in consequence of being converted to Roman Catholicism. He was one of the organizers and long the secretary of the Church Temperance Society, and founded and was the first president (1884-1899) of the American branch of the White Cross Society. He became a high authority on early American cartography and the history of the period of exploration. He died in New York city on the 4th of November 1904. In addition to numerous monographs and valuable contributions to Winsor's *Narrative and Critical History of America*, he published *The Pre-Columbian Discovery of America by the Northmen* (1868); *The Northmen in Maine* (1870); *The Moabite Stone* (1871); *The Rector of Roxburgh* (1871), a novel under the *nom de plume* of "William Hickling"; and *Verrazano the Explorer; being a Vindication of his Letter and Voyage* (1880).

DE COSTER, CHARLES THÉODORE HENRI (1827-1879), Belgian writer, was born at Munich on the 20th of August 1827. His father, Augustin de Coster, was a native of Liége, who was attached to the household of the papal nuncio at Munich, but soon returned to Belgium. Charles was placed in a Brussels bank, but in 1850 he entered the university of Brussels, where he completed his studies in 1855. He was one of the founders of the *Société des Joyeux*, a small literary club, more than one member of which was to achieve literary distinction. De Coster made his début as a poet in the *Revue trimestrielle*, founded in 1854, and his first efforts in prose were contributed to a periodical entitled *Uylenspiegel* (founded 1856). A correspondence covering the years 1850-1858, his *Lettres à Élisa*, were edited by Ch. Potvin in 1894. He was

a keen student of Rabelais and Montaigne, and familiarized himself with 16th-century French. He said that Flemish manners and speech could not be rendered faithfully in modern French, and accordingly wrote his best works in the old tongue. The success of his *Légendes flamandes* (1857) was increased by the illustrations of Félicien Rops and other friends. In 1861 he published his *Contes brabançons*, in modern French. His masterpiece is his *Légende de Thyl Uylenspiegel et de Lamme Goedzak* (1867), a 16th-century romance, in which Belgian patriotism found its fullest expression. In the preparation for this prose epic of the *gueux* he spent some ten years. Uylenspiegel (Eulenspiegel) has been compared to Don Quixote, and even to Panurge. He is the type of the 16th-century Fleming, and the history of his resurrection from the grave itself was accepted as an allegory of the destiny of the race. The exploits of himself and his friend form the thread of a semi-historical narrative, full of racy humour, in spite of the barbarities that find a place in it. This book also was illustrated by Rops and others. In 1870 De Coster became professor of general history and of French literature at the military school. His works however were not financially profitable; in spite of his government employment he was always in difficulties; and he died in much discouragement on the 7th of May 1879 at Ixelles, Brussels. The expensive form in which *Uylenspiegel* was produced made it open only to a limited class of readers, and when a new and cheap edition in modern French appeared in 1893 it was received practically as a new book in France and Belgium.

DECOY, a contrivance for the capture or enticing of duck and other wild fowl within range of a gun, hence any trap or enticement into a place or situation of danger. Decoys are usually made on the following plan: long tunnels leading from the sea, channel or estuary into a pool or pond are covered with an arched net, which gradually narrows in width; the ducks are enticed into this by a tame trained bird, also known as a "decoy" or "decoy-duck." In America the "decoy" is an artificial bird, placed in the water as if it were feeding, which attracts the wild fowl within range of the concealed sportsman. The word "decoy" has, etymologically, a complicated history. It appears in English first in the 17th century in these senses as "coy" and "coy-duck," from the Dutch *kooi*, a word which is ultimately connected with Latin *cavea*, hollow place, "cage."[1] The *de-*, with which the word begins, is either a corruption of "duck-coy," the Dutch article *de*, or a corruption of the Dutch *eende-kooi*, *eende*, duck. The *New English Dictionary* points out that the word "decoy" is found in the particular sense of a sharper or swindler as a slang term slightly earlier than "coy" or "decoy" in the ordinary sense, and, as the name of a game of cards, as early as 1550, apparently with no connexion in meaning. It is suggested that "coy" may have been adapted to this word.

1 Distinguish "coy," affectedly shy or modest, from O. Fr. *coi*, Lat. *quietus*, quiet.

DECREE (from the past participle, *decretus*, of Lat. *decernere*), in earlier form *Decreet*, an authoritative decision having the force of law; the judgment of a court of justice. In Roman law, a decree (*decretum*) was the decision of the emperor, as the supreme judicial officer, settling a case which had been referred to him. In ecclesiastical law the term was given to a decision of an ecclesiastical council settling a doubtful point of doctrine or discipline (cf. also Decretals). In English law decree was more particularly the judgment of a court of equity, but since the Judicature Acts the expression "judgment" (*q.v.*) is employed in reference to the decisions of all the divisions of the supreme court. A "decree *nisi*" is the conditional order for a dissolution of marriage made by the divorce court, and it is made "absolute" after six months (which period may, however, be shortened) in the absence of sufficient cause shown to the contrary. (See Divorce.) *Decreet arbitral* is a Scottish phrase for the award of an arbitrator.

DECRETALS (*Epistolae decretales*), the name (see Decree above), which is given in Canon Law to those letters of the pope which formulate decisions in ecclesiastical law; they are generally given in answer to consultations, but are sometimes due to the initiative of the popes. These furnish, with the canons of the councils, the chief source of the legislation of the church, and form the greater part of the *Corpus Juris*. In this connexion they are dealt with in the article on Canon Law (*q.v.*).

The False Decretals. A special interest, however, attaches to the celebrated collection known by this name. This collection, indeed, comprises at least as many canons of councils as decretals, and the decretals contained in it are not all forgeries. It is an amplification and interpolation, by means of spurious decretals, of the canonical collection in use in the Church of Spain in the 8th century, all the documents in which are perfectly authentic. With these amplifications, the collection dates from the middle of the 9th century. We shall give a brief account of its contents, its history and its influence on canon law.

The author assumes the name of Isidore, evidently the archbishop of Seville, who was credited with a preponderating part in the compilation of the *Hispana*; he takes in addition the surname of Mercator, perhaps because he has made use of two passages of Marius Mercator. Hence the custom of alluding to the author of the collection under the name of the pseudo-Isidore.

The collection itself is divided into three parts. The first, which is entirely spurious, contains, after the preface and various introductory sections, seventy letters attributed to the popes of the first three centuries, up to the council of Nicaea, *i.e.* up to but not including St Silvester; all these letters are a fabrication of the pseudo-Isidore, except two spurious letters of Clement, which were already known. The second part is the collection of councils, classified according to their regions, as it figures in the *Hispana*; the few spurious pieces which are added, and notably the famous Donation of Constantine, were already in existence. In the third part the author continues the series of decretals which he had interrupted at the council of Nicaea. But as the collection of authentic decretals does not begin till Siricius (385), the pseudo-Isidore first forges thirty letters, which he attributes to the popes from Silvester to Damasus; after this he includes the authentic decretals, with the intermixture of thirty-five apocryphal ones, generally given under the name of those popes who were not represented in the authentic collection, but sometimes also under the names of the others, for example, Damasus, St Leo, Vigilius and St Gregory; with one or two exceptions he does not interpolate genuine decretals. The series stops at St Gregory the Great (d. 604), except for one letter of Gregory II. (715-731). The forged letters are not, for the most part, entirely composed of fresh material; the author draws his inspiration from the notices on each of the popes given in the *Liber Pontificalis*; he inserts whole passages from ecclesiastical writers; and he antedates the evidences of a discipline which actually existed; so it is by no means all invented.

Thus the authentic elements were calculated to serve as a passport for the forgeries, which were, moreover, quite skilfully composed. In fact, the collection thus blended was passed from hand to hand without meeting with any opposition. At most all that was asked was whether those decretals which did not appear in the *Liber canonum* (the collection of Dionysius Exiguus, accepted in France) had the force of law, but Pope Nicholas having answered that all the pontifical letters had the same authority (see *Decr. Gra.* Dist. xix. c. 1), they were henceforward accepted, and passed in turn into the later canonical collections. No doubts found an expression until the 15th century, when Cardinal Nicholas of Cusa (d. 1464) and Juan Torquemada (d. 1468) freely expressed their suspicions. More than one scholar of the 16th century, George Cassander, Erasmus, and the two editors of the *Decretum* of Gratian, Dumoulin (d. 1568) and Le Conte (d. 1577), decisively rejected the False Decretals. This contention was again upheld, in the form of a violent polemic against the papacy, by the Centuriators of Magdeburg (*Ecclesiastica historia*, Basel, 1559-1574); the attempt at refutation by the Jesuit Torres (*Adversus Centur. Magdeburg. libri quinque*, Florence, 1572) provoked a violent rejoinder from the Protestant minister David Blondel (*Pseudo-Isidorus et Turrianus rapulantes*, Geneva, 1620). Since then, the conclusion has been accepted, and all researches have been of an almost exclusively historical character. One by one the details are being precisely determined, and the question may now almost be said to be settled.

Date.

In the first place, an exact determination of the date of the collection has been arrived at. On the one hand, it cannot go back further than 847, the date of the False Capitularies, with which the author of the False Decretals was acquainted.[1] On the other hand, in a letter of Lupus, abbot of Ferrières, written in 858, and in the synodical letter of the council of Quierzy in 857 are to be found quotations which are certainly from these false decretals; and further, an undoubted allusion in the statutes given by Hincmar to his diocese on the 1st of November 852. The composition of the collection must then be dated approximately at 850.

Aim of the author.

The object which the forger had in view is clearly stated in his preface; the reform of the canon law, or rather its better application. But, again, in what particular respects he wishes it to be reformed can be best deduced from certain preponderant ideas which make themselves felt in the apocryphal documents. He constantly harps upon accusations brought against bishops and the way they were judged; his wish is to prevent them from being unjustly accused, deposed or deprived of their sees; to this end he multiplies the safeguards of procedure, and secures the right of appeal to the pope and the possibility of restoring bishops to their sees. His object, too, was to protect the property, as well as the persons, of the clergy against the encroachments of the temporal power. In the second place, Isidore wishes to increase the strength and cohesion of the churches; he tries to give absolute stability to the diocese and the ecclesiastical province; he reinforces the rights of the bishop and his comprovincials, while he initiates a determined campaign against the *chorepiscopi*; finally, as the keystone of the arch he places the papacy. These aims are most laudable, and in no way subversive; but the author must have had some particular reasons for emphasizing these questions rather than others; and the examination of these reasons may help us to determine the nationality of this collection.

Nationality of the collection.

The name of Isidore usurped by the author at first led to the supposition that the False Decretals originated in Spain; this opinion no longer meets with any support; it is enough to point out that there is no Spanish manuscript of the collection, at least until the 13th century. In the 16th century the Protestants, who wished to represent the forgeries in the light of an attempt in favour of the papacy, ascribed the origin of the False Decretals to Rome, but neither the manuscript tradition nor the facts confirm this view, which is nowadays entirely abandoned. Everybody is agreed in placing the origin of the False Decretals within the Frankish empire. Within these limits, three different theories have successively arisen: “At first it was thought that Isidore’s domicile could be fixed in the province of Mainz, it is now about fifty years ago that the balance of opinion was turned in favour of the province of Reims; and now, after the lapse of about twenty years, several authors have suggested the province of Tours” (P. Fournier, *Étude sur les Fausses Décrétales*). In favour of Mainz, especial stress was laid on the fact that it was the country of Benedictus Levita, the compiler of the False Capitularies, to which the False Decretals are closely related. But Benedict, the deacon of Otgar of Mainz, is as much of a hypothetical personage as Isidorus Mercator; moreover, in the middle of the 9th century the condition of the province of Mainz was not disturbed, nor were the *chorepiscopi* menaced. In favour of Reims, it has been pointed out that it was there that the first judicial use of the False Decretals is recorded, in the trials of Rothad, bishop of Soissons (d. 869), and of Hincmar the younger, bishop of Laon (d. *c.* 882); and an application of the axiom has been attempted: *Is fecit cui prodest*. But both these trials took place later than 852, at which date the existence of the collection is an established fact; the texts of it were used, but they were in existence before. Between 847 and 852, the province of Reims was disturbed by another affair, that

of the clergy ordained by Ebbo at the time of his short restoration to the see of Reims, in 840-841; these clerics, Vulfadus (afterwards archbishop of Bourges), and a few others, had been suspended by Hincmar on his election in 845. But the affair of Ebbo's clergy did not become critical till the council of Soissons in 853; up till then these clergy had, so far as we know, produced no documents, and the citations from the False Decretals made in their later writings do not prove that they had forged them. Moreover, Hincmar would not have cited the forged letters of the popes in 852; above all, this theory would not explain the chief preoccupation of the forger, which is to protect bishops against unjust judgments and depositions. We must, then, look for conditions in which the bishops were concerned. It is precisely this which has suggested the province of Tours. Brittany, which was dependent on the province of Tours, had just for a time recovered its independence, thanks to its duke Nominoé. The struggle between the two nationalities, the Celt and the Frank, found a reflexion in the sphere of religion. The Breton bishops were for the most part abbots of monasteries, who had but little consideration for the territorial limits of the civitates; and many of the religious usages of the Bretons differed profoundly from those of the Franks. Charlemagne had divided up the Breton dioceses and established in them Frankish bishops. Nominoé hastened to depose the four Frankish bishops, after wringing from them by force confessions of simony; he then established a metropolitan see at Dol. Hence arose incessant complaints on the part of the dispossessed bishops, of the metropolitan of Tours, and his suffragans, notably those of Angers and Le Mans, which were more exposed than the others to the incursions of the Bretons; and this gave rise to numerous papal letters, and all this throughout a period of thirty years. There were requests that the bishops should be judged according to the rules, protests against the interlopers, demands for the restoration of the bishops to their sees. These circumstances fall in perfectly with the questions about which, as we have pointed out, the pseudo-Isidore was mainly concerned: the judgment of bishops, and the stability of the ecclesiastical organizations.

In the province of Tours, attempts have been made to define more clearly the centre of the forgeries, and the most recent authorities fix upon Le Mans. The sole argument, though a very weighty one, is found in the undeniable relation, revealed in an astonishing similarity both in expressions and composition, which exists between these forgeries and some other documents certainly fabricated at Le Mans, under the episcopate of Aldric (832-856), notably the *Actus Pontificum Cenomanis in urbe degentium*, in which there is no lack of forged documents. These certainly bear the mark of the same hand.

Though we cannot admit that the False Decretals were composed in order to enforce the rights of the papacy, we may at least consider whether the popes did not make use of the False Decretals to support their rights. It is certain that in 864 Rothad of Soissons took with him to Rome, if not the collection, at least important extracts from the pseudo-Isidore; M. Fournier has pointed out in the letters of the pope of that time, "a literary influence, which is shown in the choice of expressions and metaphors," notably in those passages relating to the *restitutio spolii*; but he concludes by affirming that the ideas and acts of Nicholas were not modified by the new collection: even before 864 he acted in affairs concerning bishops, *e.g.* in the case of the Breton bishops or the adversaries of Photius, patriarch of Constantinople, exactly as he acted later; all that can be said is that the False Decretals, though not expressly cited by the pope, "led him to accentuate still further the arguments which he drew from the decrees of his predecessors," notably with regard to the *exceptio spolii*. In the papal letters of the end of the 9th and the whole of the 10th century, only two or three insignificant citations of the pseudo-Isidore have been pointed out; the use of the pseudo-Isidorian forged documents did not become prevalent at Rome till about the middle of the 11th century, in consequence of the circulation of the canonical collections in which they figured; but nobody then thought of casting any doubts on the authenticity of those documents. One thing only is established, and this may be said to have been the real effect of the False Decretals, namely, the powerful impulse which they gave in the Frankish territories to the movement towards centralization round the see of Rome, and the legal obstacles which they opposed to unjust proceedings against the bishops.

Canonical influence.

Bibliography.—The best edition is that of P. Hinschius, *Decretales pseudo-Isidorianae et capitula Angilramni* (Leipzig, 1863). In it the authentic texts are printed in two columns, the forgeries across the whole width of the page; an important preface of ccxxviii. pages contains, besides the classification of the MSS., a profound study of the sources and other questions bearing on the collection. After the works cited above, the following dissertations should be noted. Placing the origin of the False Decretals at Rome is: A. Theiner, *De pseudo-Isidoriana canonum collectione* (Breslau, 1827); at Mainz, the brothers Ballerini, *De antiquis collectionibus et collectoribus canonum*, iii. (*S. Leonis opera*, t. iii.; Migne, *Patrologia Lat.* t. 56); Blascus, *De coll. canonum Isidori Mercatoris* (Naples, 1760); Wasserschleben, *Beiträge zur Geschichte der falschen Dekretalen* (Breslau, 1844); in the province of Reims: Weizsäcker, "Die pseudoisidorianische Frage," in the *Histor. Zeitschrift* of Sybel (1860); Hinschius, Preface, p. ccviii.; A. Tardif, *Histoire des sources du droit canonique* (Paris, 1887); Schneider, *Die Lehre der Kirchenrechtsquellen* (Regensburg, 1892). An excellent résumé of the question; seems more favourable to Le Mans in the article of the *Kirchenlexicon* of Wetzer and Welte (2nd ed.); F. Lot, *Études sur le règne de Hugues Capet* (Paris, 1903); Lesne, *La Hiérarchie episcopale en Gaule et Germanie* (Paris, 1905); for the province of Tours and Le Mans: B. Simson, *Die Entstehung der pseudoisidor. Fälschungen in Le Mans* (Leipzig, 1886. It is he who pointed out the connexion with the forgeries of Le Mans); especially Paul Fournier, "La Question des fausses décrétales," in the *Nouvelle Revue historique de droit français et étranger* (1887, 1888); in the *Congrès internat. des savants cathol.* t. ii.; "Étude sur les fausses décrétales," in *Revue d'histoire ecclésiastique de Louvain* (1906, 1907), to which the above article is greatly indebted.

(A. Bo.*)

1 The False Capitularies are for civil legislation what the False Decretals are for ecclesiastical legislation: three books of Capitularies of the Frankish kings, more of which are spurious than authentic. The author gives himself out as a certain Benedict, a deacon of the church of Mainz; hence the name by which he is usually known, Benedictus Levita. The two false collections are closely akin, and are doubtless the fabrication of the same hands.

DECURIO, a Roman official title, used in three connexions. (1) A member of the senatorial order in the Italian towns under the administration of Rome, and later in provincial towns organized on the Italian model (see Curia 4). The number of *decuriones* varied in different towns, but was usually 100. The qualifications for the office were fixed in each town by a special law for that community (*lex municipalis*). Cicero (*in Verr.* 2. 49, 120) alludes to an age limit (originally thirty years, until lowered by Augustus to twenty-five), to a property qualification (cf. Pliny, *Ep.* i. 19. 2), and to certain conditions of rank. The method of appointment varied in different towns and at different periods. In the early municipal constitution ex-magistrates passed automatically into the senate of their town; but at a later date this order was reversed, and membership of the senate became a qualification for the magistracy. Cicero (*l.c.*) speaks of the senate in the Sicilian towns as appointed by a vote of the township. But in most towns it was the duty of the chief magistrate to draw up a list (*album*) of the senators every five years. The *decuriones* held office for life. They were convened by the magistrate, who presided as in the Roman senate. Their powers were extensive. In all matters the magistrates were obliged to act according to their direction, and in some towns they heard cases of appeal against judicial sentences passed by the magistrate. By the time of the municipal law of Julius Caesar (45 B.C.) special privileges were conferred on the *decuriones*, including the right to appeal to Rome for trial in criminal cases. Under the principate their status underwent a marked decline. The office was no longer coveted, and documents of the 3rd and 4th centuries show that means were devised to compel members of the towns to undertake it. By the time of the jurists it had become hereditary and compulsory. This change was largely due to the heavy financial burdens which the Roman government laid on the municipal senates. (2) The president of a *decuria*, a subdivision of the *curia* (*q.v.*). (3) An officer in the Roman cavalry, commanding a troop of ten men (*decuria*).

Bibliography.—C. G. Bruns, *Fontes juris Romani*, c. 3, No. 18, c. 4, Nos. 27, 29, 30 (*leges municipales*); J. C. Orelli, *Inscr. Latinae*, No. 3721 (Album of Canusium); Godefroy, *Paratitl. ad cod. Theodosianam*, xii. 1 (vol. iv. pp. 352 et seq., ed. Ritter); J. Marquardt, *Römische Staatsverwaltung*, i. pp. 183 et seq. (Leipzig, 1881); P. Willems, *Droit public romain*, pp. 535 et seq. (Paris, 1884); Pauly-Wissowa, *Realencyclopädie*, IV. ii. pp. 2319 foll. (Stuttgart, 1901); W. Liebenam, *Städteverwaltung im römischen Kaiserreiche* (Leipzig, 1900).

(A. M. Cl.)

DÉDÉAGATCH, a seaport of European Turkey, in the vilayet of Adrianople, 10 m. N.W. of the Maritza estuary, on the Gulf of Enos, an inlet of the Aegean Sea. Pop. (1905) about 3000, mostly Greeks. Until 1871 Dédéagatch was a mere cluster of fishermen's huts. A new town then began to spring up, settlers being attracted by the prospect of opening up a trade in the products of a vast forest of valonia oaks which grew near. In 1873 it was made the chief town of a *Kaza*, to which it gave its name, and a *Kaimakam* was appointed to it. In 1884 it was raised in administrative rank from a *Kaza* to a *Sanjak*, and the governor became a *Mutessarif*. In 1889 the Greek archbishopric of Enos was transferred to Dédéagatch. On the opening, early in 1896, of the Constantinople-Salonica railway, which has a station here, a large proportion of the extensive transit trade which Enos, situated at the mouth of the Maritza, had acquired, was immediately diverted to Dédéagatch, and an era of unprecedented prosperity began; but when the railway connecting Burgas on the Black Sea with the interior was opened, in 1898, Dédéagatch lost all it had won from Enos. Owing to the lack of shelter in its open roadstead, the port has not become the great commercial centre which its position otherwise qualifies it to be. It is, however, one of the chief outlets for the grain trade of the Adrianople, Demotica and Xanthi districts. The valonia trade has also steadily developed, and is supplemented by the export of timber, tobacco and almonds. In 1871, while digging out the foundations of their houses, the settlers found many ancient tombs. Probably these are relics, not of the necropolis of the ancient *Zonê*, but of a monastic community of Dervishes, of the Dédé sect, which was established here in the 15th century, shortly after the Turkish conquest, and gave to the place its name.

DEDHAM, a township and the county seat of Norfolk county, Massachusetts, U.S.A., with an area of 23 sq. m. of comparatively level country. Pop. (1890) 7123; (1900) 7457, of whom 2186 were foreign-born; (1910 U.S. census) 9284. The township is traversed by the New York, New Haven & Hartford railway, and by interurban electric lines. It contains three villages, Dedham, East Dedham and Oakdale. Dedham has a public library (1854; incorporated 1871). The Dedham historical society was organized in 1859 and was incorporated in 1862. The Fairbanks house was erected in part as early as 1654. Carpets, handkerchiefs and woollen goods are manufactured, and a pottery here is reputed to make the only true crackleware outside the East. Dedham was "planted" in 1635 and was incorporated in 1636. It was one of the first two inland settlements of the colony, being coeval with Concord. The original plantation, about 20 m. long and 10 m. wide, extended from Roxbury and Dorchester to the present state line of Rhode Island: from this territory several townships were created, including Westwood (pop. in 1910, 1266), in 1897. A free public school, one of the first in America to be supported by direct taxation, was established in Dedham in 1645. In the Woodward tavern, the birthplace of Fisher Ames, a convention met in September 1774 and adjourned to Milton (*q.v.*), where it passed the Suffolk Resolves.

DEDICATION (Lat. *dedicatio*, from *dedicare*, to proclaim, to announce), properly the setting apart of anything by solemn proclamation. It is thus in Latin the term particularly applied to the consecration of altars, temples and other sacred buildings, and also to the inscription prefixed to a book, &c., and addressed to some particular person. This latter practice, which formerly had the purpose of gaining the patronage and support of the person so addressed, is now only a mark of affection or regard. In law, the word is used of the setting apart by a private owner of a road to public use. (See HIGHWAY.)

The Feast of Dedication (חנכה; τὰ ἐγκαίνια) was a Jewish festival observed for eight days from the 25th of Kislev (*i.e.* about December 12) in commemoration of the reconsecration (165 B.C.) of the temple and especially of the altar of burnt offering, after they had been desecrated in the persecution under Antiochus Epiphanes (168 B.C.). The distinguishing features of the festival were the illumination of houses and synagogues, a custom probably taken over from the feast of tabernacles, and the recitation of Psalm xxx. The biblical references are 1 Macc. i. 41-64, iv. 36-39; 2 Macc. vi. 1-11; John x. 22. See also 2 Macc. i. 9, 18; ii. 16; and Josephus, *Antiq.* xii. v. 4. J. Wellhausen suggests that the feast was originally connected with the winter solstice, and only afterwards with the events narrated in Maccabees.

Dedication of Churches.—The custom of solemnly dedicating or consecrating buildings as churches or chapels set apart for Christian worship must be almost as old as Christianity itself. If we find no reference to it in the New Testament or in the very earliest apostolic or post-apostolic writings, it is merely due to the fact that Christian churches had not as yet begun to be built. Throughout the ante-Nicene period, until the reign of Constantine, Christian churches were few in number, and any public dedication of them would have been attended with danger in those days of heathen persecution. This is why we are ignorant as to what liturgical forms and what consecration ritual were employed in those primitive times. But when we come to the earlier part of the 4th century allusions to and descriptions of the consecration of churches become plentiful.

Like so much else in the worship and ritual of the Christian church this service is probably of Jewish origin. The hallowing of the tabernacle and of its furniture and ornaments (Exodus xl.); the dedication of Solomon's temple (1 Kings viii.) and of the second temple by Zerubbabel (Ezra vi.), and its rededication by Judas Maccabaeus (see above), and the dedication of the temple of Herod the Great (Josephus, *Antiq. of the Jews*, bk. xv. c. xi. § 6), and our Lord's recognition of the Feast of Dedication (St John xi. 22, 23)—all these point to the probability of the Christians deriving their custom from a Jewish origin, quite apart from the intrinsic appropriateness of such a custom in itself.

Eusebius (*Hist. Eccles.* lib. x. cap. 3) speaks of the dedication of churches rebuilt after the Diocletian persecution, including the church at Tyre in A.D. 314. The consecrations of the church of the Holy Sepulchre at Jerusalem in A.D. 335, which had been built by Constantine, and of other churches after his time, are described both by Eusebius and by other ecclesiastical historians. From them we gather that every consecration was accompanied by a celebration of the Holy Eucharist and a sermon, and special prayers of a dedicatory character, but there is no trace of the elaborate ritual, to be described presently, of the medieval pontificals dating from the 8th century onwards.

The separate consecration of altars is provided for by canon 14 of the council of Agde in 506, and by canon 26 of the council of Epaone in 517, the latter containing the first known reference to the usage of anointing the altar with chrism. The use of both holy water and of unction is attributed to St Columbanus, who died in 615 (Walafrid Strabo, *Vita S. Galli*, cap. 6).

There was an annual commemoration of the original dedication of the church, a feast with its octave extending over eight days, during which Gregory the Great encouraged the erection of booths and general feasting on the part of the populace, to compensate them for, and in some way to take the place of, abolished heathen festivities (Sozomen, *Hist. Eccles.* lib. ii. cap. 26; Bede, *Hist. Eccles.* lib. i. cap. 30).

At an early date the right to consecrate churches was reserved to bishops, as by canon 37 of the first council of Bracara in 563, and by the 23rd of the Irish collections of canons, once attributed to St Patrick, but hardly to be put earlier than the 8th century (Haddon and Stubbs, *Councils, &c.*, vol. ii. pt. 2, p. 329).

When we come to examine the MS. and printed service-books of the medieval church, we find a lengthy and elaborate service provided for the consecration of churches. It is contained in the pontifical. The earliest pontifical which has come down to us is that of Egbert, archbishop of York (732-766), which, however, only survives in a 10th-century MS. copy. Later pontificals are numerous; we cannot describe all their variations. A good idea, however, of the general character of the service will be obtained from a skeleton of it as performed in this country before the Reformation according to the use of Sarum. The service in question is taken from an early 15th-century pontifical in the Cambridge University Library as printed by W. Makell in *Monumenta ritualia ecclesiae Anglicanae*, and ed., vol. i. pp. 195-239.

There is a preliminary office for laying a foundation-stone. On the day of consecration the bishop is to vest in a tent outside the church, thence to proceed to the door of the church on the outside, a single deacon being inside the church, and there to bless holy water, twelve lighted candles being placed outside, and twelve inside the church. He is then to sprinkle the walls all round outside, and to knock at the door; then to sprinkle the walls all round outside a second time and to knock at the door again; then to sprinkle the walls all round outside a third time, and a third time to knock at the door, by which he will then enter, all laity being excluded. The bishop is then to fix a cross in the centre of the church, after which the litany is said, including a special clause for the consecration of the church and altar. Next the bishop inscribes the alphabet in Greek letters on one of the limbs of St Andrew's cross from the left east corner to the right west corner on the pavement cindered for the purpose, and the alphabet in Latin on the other limb from the right east corner to the left west corner. Then he is to genuflect before the altar or cross. Then he blesses water, mingled with salt, ashes and wine, and sprinkles therewith all the walls of the church inside thrice, beginning at the altar; then he sprinkles the centre of the church longwise and crosswise on the pavement, and then goes round the outside of the church sprinkling it thrice. Next reentering the church and taking up a central position he sprinkles holy water to the four points of the compass, and toward the roof. Next he anoints with chrism the twelve internal and twelve external wall-crosses, afterwards perambulating the church thrice inside and

outside, censing it.

Then there follows the consecration of the altar. First, holy water is blessed and mixed with chrism, and with the mixture the bishop makes a cross in the middle of the altar, then on the right and the left, then on the four horns of the altar. Then the altar is sprinkled seven times or three times with water not mixed with chrism, and the altar-table is washed therewith and censed and wiped with a linen cloth. The centre of the altar is next anointed with the oil of the catechumens in the form of a cross; and the altar-stone is next anointed with chrism; and then the whole altar is rubbed over with oil of the catechumens and with chrism. Incense is next blessed, and the altar censed, five grains of incense being placed crosswise in the centre and at the four corners, and upon the grains five slender candle crosses, which are to be lit. Afterwards the altar is scraped and cleansed; then the altar-cloths and ornaments having been sprinkled with holy water are placed upon the altar, which is then to be censed.

All this is subsidiary to the celebration of mass, with which the whole service is concluded. The transcription and description of the various collects, psalms, anthems, benedictions, &c., which make up the order of dedication have been omitted for the sake of brevity.

The Sarum order of dedication described above is substantially identical with the Roman order, but it would be superfluous to tabulate and describe the lesser variations of language or ritual. There is, however, one very important and significant piece of ritual, not found in the above-described English church order, but always found in the Roman service, and not infrequently found in the earlier and later English uses, in connexion with the presence and use of relics at the consecration of an altar. According to the Roman ritual, after the priest has sprinkled the walls of the church inside thrice all round and then sprinkled the pavement from the altar to the porch, and sideways from wall to wall, and then to the four quarters of the compass, he prepares some cement at the altar. He then goes to the place where the relics are kept, and starts a solemn procession with the relics round the outside of the church. There a sermon is preached, and two decrees of the council of Trent are read, and the founder’s deed of gift or endowment. Then the bishop, anointing the door with chrism, enters the church with the relics and deposits them in the cavity or confession in the altar. Having been enclosed they are censed and covered in, and the cover is anointed. Then follows the censing and wiping of the altar as in the Sarum order.

This use of relics is very ancient and can be traced back to the time of St Ambrose. There was also a custom, now obsolete, of enclosing a portion of the consecrated Eucharist if relics were not obtainable. This was ordered by cap. 2 of the council of Celchyth (Chelsea) in 816. But though ancient the custom of enclosing relics was not universal, and where found in English church orders, as it frequently is found from the pontifical of Egbert onwards, it is called the “Mos Romanus” as distinguished from the “Mos Anglicanus” (*Archaeologia*, liv. 416). It is absent from the description of the early Irish form of consecration preserved in the *Leabhar Breac*, translated and annotated by Rev. T. Olden in the *Transactions of the St Paul’s Ecclesiolog. Soc.* vol. iv. pt. ii. p. 98.

The curious ritual act, technically known as the *abecedarium*, *i.e.* the tracing of the alphabet, sometimes in Latin characters, sometimes in Latin and Greek, sometimes, according to Menard, in Latin, Greek and Hebrew, along the limbs of St Andrew’s cross on the floor of the church, can be traced back to the 8th century and may be earlier. Its origin and meaning are unknown. Of all explanations we like best the recent one suggested by Rossi and adopted by the bishop of Salisbury. This interprets the St Andrew’s cross as the initial Greek letter of Christus, and the whole act as significant of taking possession of the site to be consecrated in the name of Christ, who is the Alpha and Omega, the word of God, combining in himself all letters that lie between them, every element of human speech. The three languages may then have been suggested by the Latin, Greek and Hebrew, in which his title was written on the cross.

The disentangling the Gallican from the Roman elements in the early Western forms of service is a delicate and difficult task, undertaken by Monsignor Louis Duchesne, who shows how the former partook of a funerary and the latter of a baptismal character (*Christian Worship* (London, 1904), cap. xii.).

The dedication service of the Greek Church is likewise long and elaborate. Relics are to be prepared and guarded on the day previous in some neighbouring sacred building. On the morning following, all ornaments and requisites having been got ready, the laity being excluded, the bishop and clergy vested proceed to fix in its place and consecrate the altar, a long prayer of dedication being said, followed by a litany. The altar is then sprinkled with warm water, then with wine, then anointed with chrism in the form of a cross. The altar, the book of the gospels, and all cloths are then censed, every pillar is crossed with chrism, while various collects are said and psalms recited. One lamp is then filled with oil and lit, and placed on the altar, while clergy bring in other lamps and other ornaments of the church. On the next day—if the service cannot be concluded in one day—the bishop and clergy go to the building where the relics have been kept and guarded. A procession is formed and advances thence with the relics, which are borne by a priest in a holy vessel (*discus*) on his head; the church having been entered, the relics are placed by him with much ceremonial in the “confession,” the recess prepared in or about the altar for their reception, which is then anointed and sealed up. After this the liturgy is celebrated both on the feast of dedication and on seven days afterwards.

There is no authorized form for the dedication of a church in the reformed Church of England. A form was drawn up and approved by both houses of the convocation of Canterbury under Archbishop Tenison in 1712, and an almost identical form was submitted to convocation in 1715, but its consideration was not completed by the Lower House, and neither form ever received royal sanction. The consequence has been that Anglican bishops have fallen back on their undefined *jus liturgicum*, and have drawn up and promulgated forms for use in their various dioceses, some of them being content to borrow from other dioceses for this purpose. There is a general similarity, with a certain amount of difference in detail, in these various forms. In the diocese of London the bishop, attended by clergy and churchwardens, receives at the west door, outside, a petition for consecration; the procession then moves round the whole church outside, while certain psalms are chanted. On again reaching the west door the bishop knocks thrice for admission, and the door being opened the procession advances to the east end of the church. He there lays the keys on the table “which is to be hallowed.” The *Veni Creator* is then sung kneeling, followed by the litany with special suffrages. The bishop

then proceeds to various parts of the church and blesses the font, the chancel, with special references to confirmation and holy matrimony, the lectern, the pulpit, the clergy stalls, the choir seats, the holy table. The deed of consecration is then read and signed, and the celebration of Holy Communion follows with special collects, epistle and gospel.

The Church of Ireland and the episcopal Church of Scotland are likewise without any completely authorized form of dedication, and their archbishops or bishops have at various times issued forms of service on their own authority.

(F. E. W.)

DE DONIS CONDITIONALIBUS, a chapter of the statute of Westminster the Second (1285) which originated the law of entail. Strictly speaking, a form of entail was known before the Norman feudal law had been domesticated in England. The common form was a grant "to the feoffee and the heirs of his body," by which limitation it was sought to prevent alienation from the lineage of the first purchaser. These grants were also known as *feuda conditionata*, because if the donee had no heirs of his body the estate reverted to the donor. This right of reversion was evaded by the interpretation that such a gift was a conditional fee, which enabled the donee, if he had an heir of the body born alive, to alienate the land, and consequently disinherit the issue and defeat the right of the donor. To remedy this the statute *De Donis Conditionalibus* was passed, which enacted that, in grants to a man and the heirs of his body, the will of the donor according to the form in the deed of gift manifestly expressed, should be from thenceforth observed; so that they to whom the land was given under such condition, should have no power to alienate the land so given, but that it should remain unto the issue of those to whom it was given after their death, or unto the giver or his heirs, if issue fail. Since the passing of the statute an estate given to a man and the heirs of his body has been known as an estate tail, or an estate in fee tail (*feudum talliatum*), the word tail being derived from the French *tailler*, to cut, the inheritance being by the statute cut down and confined to the heirs of the body. The operation of the statute soon produced innumerable evils: "children, it is said, grew disobedient when they knew they could not be set aside; farmers were deprived of their leases; creditors were defrauded of their debts; innumerable latent entails were produced to deprive purchasers of the land they had fairly bought; treasons also were encouraged, as estates tail were not liable to forfeiture longer than for the tenant's life" (Williams, *Real Property*). Accordingly, the power of alienation was reintroduced by the judges in Taltarum's case (*Year Book*, 12 Edward IV., 1472) by means of a fictitious suit or recovery which had originally been devised by the regular clergy for evading the statutes of mortmain. This was abolished by an act passed in 1833. (See FINE.)

DEDUCTION (from Lat. *deducere*, to take or lead from or out of, derive), a term used in common parlance for the process of taking away from, or subtracting (as in mathematics), and specially for the argumentative process of arriving at a conclusion from evidence, *i.e.* for any kind of inference.[1] In this sense it includes both arguments from particular facts and those from general laws to particular cases. In logic it is generally used in contradiction to "induction" for a kind of mediate inference, in which a conclusion (often itself called the deduction) is regarded as following necessarily under certain fixed laws from premises. This, the most common, form of deduction is the syllogism (*q.v.*; see also LOGIC), which consists in taking a general principle and deriving from it facts which are necessarily involved in it. This use of deduction is of comparatively modern origin; it was originally used as the equivalent of Aristotle's ἀπαγωγή (see *Prior Analytics*, B xxv.). The modern use of deduction is practically identical with the Aristotelian συλλογισμός.

1 Two forms of the verb are used, "deduce" and "deduct"; originally synonymous, they are now distinguished, "deduce" being confined to arguments, "deduct" to quantities.

DEE, JOHN (1527-1608), English mathematician and astrologer, was born on the 13th of July 1527, in London, where his father was, according to Wood, a wealthy vintner. In 1542 he was sent to St John's College, Cambridge. After five years spent in mathematical and astronomical studies, he went to Holland, in order to visit several eminent continental mathematicians. Having remained abroad nearly a year, he returned to Cambridge, and was elected a fellow of Trinity College, then first erected by King Henry VIII. In 1548 he took the degree of master of arts; but in the same year he found it necessary to leave England on account of the suspicions entertained of his being a conjurer; these were first excited by a piece of machinery, which, in the *Pax* of Aristophanes, he exhibited to the university, representing the scarabaeus flying up to Jupiter, with a man and a basket of victuals on its back. He went first to the university of Louvain, where he resided about two years, and then to the college of Rheims, where he had extraordinary success in his public lectures on Euclid's *Elements*. On his return to England in 1551 King Edward assigned him a pension of 100 crowns, which he afterwards exchanged for the rectory of Upton-upon-Severn, Worcestershire. Soon after the accession of Mary he was accused of using enchantments against the queen's life; but after a tedious confinement he obtained his liberty in 1555, by an order of council.

When Elizabeth ascended the throne, Dee was asked by Lord Dudley to name a propitious day for the coronation. On this occasion he was introduced to the queen, who took lessons in the mystical interpretation of his writings, and made him great promises, which, however, were never fulfilled. In 1564 he again visited the continent, in order to present his *Monas hieroglyphica* to the emperor Maximilian, to whom he had dedicated it. He returned to England in the same year; but in 1571 he was in Lorraine, whither two physicians were sent by the queen to his relief in a dangerous illness. Returning to his home at Mortlake, in Surrey, he continued his studies, and made a collection of curious books and manuscripts, and a variety of instruments. In 1578 Dee was sent abroad to consult with German physicians and astrologers in regard to the illness of the queen. On his return to England, he was employed in investigating the title of the crown to the countries recently discovered by British subjects, and in furnishing geographical descriptions. Two large rolls containing the desired information, which he presented to the queen, are still preserved in the Cottonian Library. A learned treatise on the reformation of the calendar, written by him about the same time, is also preserved in the Ashmolean Library at Oxford.

From this period the philosophical researches of Dee were concerned entirely with necromancy. In 1581 he became acquainted with Edward Kelly, an apothecary, who had been convicted of forgery and had lost both ears in the pillory at Lancaster. He professed to have discovered the philosopher's stone, and by his assistance Dee performed various incantations, and maintained a frequent imaginary intercourse with spirits. Shortly afterwards Kelly and Dee were introduced by the earl of Leicester to a Polish nobleman, Albert Laski, palatine of Siradz, devoted to the same pursuits, who persuaded them to accompany him to his native country. They embarked for Holland in September 1583, and arrived at Laski's residence in February following. Upon Dee's departure the mob, believing him a wizard, broke into his house, and destroyed a quantity of furniture and books and his chemical apparatus. Dee and Kelly lived for some years in Poland and Bohemia in alternate wealth and poverty, according to the credulity or scepticism of those before whom they exhibited. They professed to raise spirits by incantation; and Kelly dictated the utterances to Dee, who wrote them down and interpreted them.

Dee at length quarrelled with his companion, and returned to England in 1589. He was helped over his financial difficulties by the queen and his friends. In May of 1595 he became warden of Manchester College. In November 1604 he returned to Mortlake, where he died in December 1608, at the age of eighty-one, in the greatest poverty. Aubrey describes him as "of a very fair, clear sanguine complexion, with a long beard as white as milk—a very handsome man—tall and slender. He wore a goune like an artist's goune with hanging sleeves." Dee's *Speculum* or mirror, a piece of solid pink-tinted glass about the size of an orange, is preserved in the British Museum.

His principal works are—*Propaedeumata aphoristica* (London, 1558); *Monas hieroglyphica* (Antwerp, 1564); *Epistola ad Fredericum Commandinum* (Pesaro, 1570); *Preface Mathematical to the English Euclid* (1570); *Divers Annotations and Inventions added after the tenth book of English Euclid* (1570); *Epistola praefixa Ephemeridibus Joannis Feldi, a. 1557; Parallaticae commentationis praxeosque nucleus quidam* (London, 1573). The catalogue of his printed and published works is to be found in his *Compendious Rehearsal*, as well as in his letter to Archbishop Whitgift. A manuscript of Dee's, relating what passed for many years between him and some spirits, was edited by Meric Casaubon and published in 1659. *The Private Diary of Dr John Dee, and the Catalogue of his Library of Manuscripts*, edited by J. O. Halliwell, was published by the Camden Society in 1842. There is a life of Dee in Thomas Smith's *Vitae illustrium virorum* (1707); English translation by W. A. Ayton, the *Life of John Dee* (1909).

DEE (Welsh, *Dyfrdwy*; Lat., and in Milton, *Deva*), a river of Wales and England. It rises in Bala Lake, Merionethshire, which is fed by a number of small streams. Leaving the lake near the town of Bala it follows a north-easterly course to Corwen, turns thence E. by S. past Llangollen to a point near Overton, and then bends nearly north to Chester, and thereafter north-west through a great estuary opening into the Irish Sea. In the Llangollen district the Dee crosses Denbighshire, and thereafter forms the boundary of that county with Shropshire, a detached part of Flint, and Cheshire. From Bala nearly down to Overton, a distance of 35 m., during which the river falls about 330 ft., its course lies through a narrow and beautiful valley, enclosed on the south by the steep lower slopes of the Berwyn Mountains and on the north by a succession of lesser ranges. The portion known as the Vale of Llangollen is especially famous. Here an aqueduct carrying the Pontcysyllte branch of the Shropshire Union canal bestrides the valley; it is a remarkable engineering work completed by Thomas Telford in 1805. The Dee has a total length of about 70 m. and a fall of 530 ft. Below Overton it debouches upon its plain track. Below Chester it follows a straight artificial channel to the estuary, and this is the only navigable portion. The estuary, which is 14 m. long, and 5¼ m. wide at its mouth, between Hilbre Point on the English and Point of Air on the Welsh side, is not a commercial highway like the neighbouring mouth of the Mersey, for though in appearance a fine natural harbour at high tide, it becomes at low tide a vast expanse of sand, through which the river meanders in a narrow channel. The navigation, however, is capable of improvement, and schemes have been set on foot to this end. The tide rushes in with great speed over the sands, and their danger is illustrated in the well-known ballad "The Sands of Dee" by Charles Kingsley. The Dee drains an area of 813 sq. m.

DEE, a river in the south of Aberdeenshire, Scotland, pursuing a generally easterly direction from its source in the extreme west of the county till it reaches the North Sea at the city of Aberdeen. It rises in the

Wells of Dee, a spring on Ben Braeriach, one of the Cairngorms, at a height of 4061 ft. above the sea. It descends rapidly from this altitude, and by the time that it receives the Geusachan, on its right bank, about 6 m. from its source, it has fallen 2421 ft. From the mountains flanking its upper reaches it is fed by numerous burns named and unnamed. With its tributaries the river drains an area of 1000 sq. m. Rapid and turbulent during the first half of its course of 90 m., it broadens appreciably below Aboyne and the rate of flow is diminished. The channel towards its mouth was artificially altered in order to provide increased dock accommodation at Aberdeen, but, above, the stream is navigable for only barges and small craft for a few miles. It runs through scenery of transcendent beauty, especially in Braemar. About two miles above Inverey it enters a narrow rocky gorge, 300 yds. long and only a few feet wide at one part, and forms the rapids and cascades of the famous Linn of Dee. One of the finest of Scottish salmon streams, it retains its purity almost to the very end of its run. The principal places on the Dee, apart from private residences, are Castleton of Braemar, Ballater, Aboyne, Kincardine O'Neil, Banchory, Culter and Cults.

DEED (in O. Eng. *deâd*, from the stem of the verb "to do"), that which is done, an act, doing; particularly, in law, a contract in writing, sealed and delivered by the party bound to the party intended to benefit. Contracts or obligations under seal are called in English law *specialties*, and down to 1869 they took precedence in payment over *simple* contracts, whether written or not. Writing, sealing and delivery are all essential to a deed. The signature of the party charged is not material, and the deed is not void for want of a date. Delivery, it is held, may be complete without the actual handing over of the deed; it is sufficient if the act of sealing were accompanied by words or acts signifying that the deed was intended to be presently binding; and delivery to a third person for the use of the party benefited will be sufficient. On the other hand, the deed may be handed over to a third person as an *escrow*,[1] in which case it will not take effect as a deed until certain conditions are performed. Such conditional delivery may be inferred from the circumstances attending the transaction, although the conditions be not expressed in words. A deed indented, or indenture (so called because written in counterparts on the same sheet of parchment, separated by cutting a wavy line between them so as to be identified by fitting the parts together), is between two or more parties who contract mutually. The actual indentation is not now necessary to an indenture. The *deed-poll* (with a polled or smooth-cut edge, not indented) is a deed in which one party binds himself without reference to any corresponding obligations undertaken by another party. See Contract.

1 An Anglo-French law term meaning a "scroll" or strip of parchment, cognate with the English "shred." The modern French *écroue* is used for the entry of a name on a prison register.

DEEMS, CHARLES (ALEXANDER) FORCE (1820-1893), American clergyman, was born in Baltimore, Maryland, on the 4th of December 1820. He was a precocious child and delivered lectures on temperance and on Sunday schools before he was fourteen years old. He graduated at Dickinson College in 1839, taught and preached in New York city for a few months, in 1840 took charge of the Methodist Episcopal church at Asbury, New Jersey, and removed in the next year to North Carolina, where he was general agent for the American Bible Society. He was professor of logic and rhetoric at the University of North Carolina in 1842-1847, and professor of natural sciences at Randolph-Macon College (then at Boydton, Virginia) in 1847-1848, and after two years of preaching at Newbern, N.C., he held for four years (1850-1854) the presidency of Greensboro (N.C.) Female College. He continued as a Methodist Episcopal clergyman at various pastorates in North Carolina from 1854 to 1865, for the last seven years being a presiding elder and in 1859 to 1863 being the proprietor of St Austin's Institute, Wilson. In 1865 he settled in New York City, where in 1866 he began preaching in the chapel of New York University, and in 1868 he established and became the pastor of the undenominational Church of the Strangers, which in 1870 occupied the former Mercer Street Presbyterian church, purchased and given to Dr Deems by Cornelius Vanderbilt; there he remained until his death in New York city on the 18th of November 1893. He was one of the founders (1881) and president of the American Institute of Christian Philosophy and for ten years was editor of its organ, *Christian Thought*. Dr Deems was an earnest temperance advocate, as early as 1852 worked (unsuccessfully) for a general prohibition law in North Carolina, and in his later years allied himself with the Prohibition party. He was influential in securing from Cornelius Vanderbilt the endowment of Vanderbilt University, in Nashville, Tennessee. He was a man of rare personal and literary charm; he edited *The Southern Methodist Episcopal Pulpit* (1846-1852) and *The Annals of Southern Methodism* (1855-1857); he compiled *Devotional Melodies* (1842), and, with the assistance of Phoebe Cary, one of his parishioners, *Hymns for all Christians* (1869; revised, 1881); and he published many books, among which were: *The Life of Dr Adam Clarke* (1840); *The Triumph of Peace and other Poems* (1840); *The Home Altar* (1850); *Jesus* (1872), which ran through many editions and several revisions, the title being changed in 1880 to *The Light of the Nations*; *Sermons* (1885); *The Gospel of Common Sense* (1888); *The Gospel of Spiritual Insight* (1891) and *My Septuagint* (1892). The Charles F. Deems Lectureship in Philosophy was founded in his honour in 1895 at New York University by the American Institute of Christian Philosophy.

His *Autobiography* (New York, 1897) is autobiographical only to 1847, the memoir being completed by his two sons.

DEER (O. E. *déor*, *díor*, a common Teutonic word, meaning a wild animal, cf. Ger. *Tier*, Du. *dier*, &c., probably from a root *dhus-*, to breathe), originally the name of one of two British species, the red-deer or the fallow-deer, but now extended to all the members of the family *Cervidae*, in the section Pecora of the suborder Artiodactyla of the order Ungulata. (See Pecora; Artiodactyla and Ungulata.) Briefly, deer may be defined as Pecora presenting the following characteristics:—either antlers present in the male, or when these are absent, the upper canines large and sabre-like, and the lateral metacarpal bones represented only by their lower extremities. This definition will include the living and also most of the extinct forms, although in some of the latter the lateral metacarpal bones not only retain their lower ends, but are complete in their entire length.

The leading characters of antlers are described under Pecora, but these structures may be defined somewhat more fully in the following passage from the present writer's *Deer of all Lands*:—

> "Antlers are supported on a pair of solid bony processes, or pedicles, arising from the frontal bones of the skull, of which they form an inseparable portion; and if in a fully adult deer these pedicles be sawn through, they will generally be found to consist of solid, ivory-like bone, devoid of perceptible channels for the passage of blood-vessels. The pedicles are always covered with skin well supplied with blood-vessels; and in young deer, or those in which the antlers have been comparatively recently shed, the covering of skin extends over their summits, when they appear as longer or shorter projections on the forehead, according to the species. When the first or a new antler is about to be formed, the summits of these pedicles become tender, and bear small velvet-like knobs, which have a high temperature, and are supplied by an extra quantity of blood, which commences to deposit bony matter. This deposition of bony matter progresses very rapidly, and although in young deer and the adults of some species the resulting antler merely forms a simple spike, or a single fork, in full-grown individuals of the majority it assumes a more or less complexly branched structure. All this time the growing antler is invested with a skin clothed with exceedingly fine short hairs, and is most liberally supplied with blood-vessels; this sensitive skin being called the velvet. Towards the completion of its growth a more or less prominent ring of bone, termed the burr or coronet, is deposited at its base just above the junction with the pedicle; this ring tending to constrict the blood-vessels, and thus cut off the supply of blood from the antlers....
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> "When the antlers are freed from the velvet—a process usually assisted by the animal rubbing them against tree stems or boughs—they have a more or less rugose surface, owing to the grooves formed in them by the nutrient blood-vessels. Although a few living species have the antlers in the form of simple spikes in the adult male, in the great majority of species they are more or less branched; while in some, like the elk and fallow-deer, they expand into broad palmated plates, with tines, or snags, on one or both margins. In the antlers of the red-deer group, which form the type of the whole series, the following names have been applied to their different component parts and branches. The main shaft is termed the beam; the first or lowest tine the brow-tine; the second the bez-tine; the third the trez-tine, or royal; and the branched portion forming the summit the crown, or surroyals. But the antlers of all deer by no means conform to this type; and in certain groups other names have to be adopted for the branches.
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> "The antlers of young deer are in the form of simple spikes; and this form is retained in the South American brockets, although the simple antlers of these deer appear due to degeneration, and are not primitive types. Indeed, no living deer shows such primitive spike-like antlers in the adult, and it is doubtful whether such a type is displayed by any known extinct form, although many have a simple fork. In the deer of the sambar group, where the antlers never advance beyond a three-tined type, the shedding is frequently, if not invariably, very irregular; but in the majority at least of the species with complex antlers the replacement is annual, the new appendages attaining their full development immediately before the pairing-season. In such species there is a more or less regular annual increase in the complexity of the antlers up to a certain period of life, after which they begin to degenerate."

The *Cervidae* are distributed all over Europe, Asia, Northern Africa and America, but are unknown in Africa south of the Sahara. They are undoubtedly a group of European or Asiatic origin, and obtained an entrance into America at a time when that continent was connected with Asia by way of Bering Strait.

The existing members of the family are classified in the writer's *Deer of all Lands* as follows:—

A. Subfamily Cervinae.—Antlers, with one exception, present in the male; liver without a gall-bladder; a face-gland, and a gland-pit in the skull.

I. Reindeer, Genus *Rangifer*.—Lateral metacarpal bones represented only by their lower extremities; antlers present in both sexes, complex. Northern part of both hemispheres.

II. Elk, Genus *Alces*.—Lateral metacarpals as in preceding; antlers (as in the following genera) present only in the male, arising at right angles to the median longitudinal line of the skull, and extending at first in the plane of the forehead, after which, when in their fullest development, they expand into a broad palmation margined with snags. Northern portion of both hemispheres.

III. True Deer, Genus *Cervus*.—Lateral metacarpals represented only by their upper ends. Antlers arising at acute angles to the median line of the skull (as in the following genera), at first projecting from the plane of the forehead, and then continued upwards nearly in that plane, supported on short pedicles, and furnished with a brow-tine, never regularly forked at first division, but generally of large size, and with not less than three tines; the skull without ridges on the frontals forming the bases of the pedicles of the antlers. Upper canine teeth small, or wanting. Europe, Asia and N. America.

1. Red-deer Group, Subgenus *Cervus*.—Antlers rounded, usually with five or more tines, generally including a bez (second), and always a trez (third); coat of adult generally unspotted, with a large light-coloured disk surrounding the tail; young, spotted. Europe, Northern and Central Asia and North America.

2. Sika Deer, Subgenus *Pseudaxis*.—Antlers smaller and simpler, four-tined, with a trez (third), but no bez (second); coat of adult spotted, at least in summer, with a white area bordered by black in the region of the tail, which is also black and white. North-Eastern Asia.

3. Fallow-deer, Subgenus *Dama*.—Antlers without a bez, but with a trez-tine, above which the beam is more or less palmated, and generally furnished with numerous snags; coat of adult spotted in summer, uniform in

winter, with black and white markings in the region of the tail similar to those of *Pseudaxis*; young, spotted. Mediterranean region, but more widely spread in Europe during the Pleistocene epoch, and also introduced into many European countries.

4. Sambar Group, Subgenus *Rusa*.—Antlers rounded, three-tined, with the bez- and trez-tines wanting, and the beam simply forked at the summit; coat either uniform or spotted at all seasons. Indo-Malay countries and part of China.

5. Barasingha Group, Subgenus *Rucervus*.—Antlers flattened or rounded, without bez- or trez-tine, the beam dichotomously forking, and one or both branches again forked, so that the number of tines is at least four; brow-tine forming a right angle or a continuous curve with the beam; coat of adult generally more or less uniform, of young spotted. Indo-Malay countries.

IV. Muntjacs, Genus *Cervulus*.—Lateral metacarpals as in *Cervus*; antlers small, with a brow-tine and an unbranched beam, supported on long bony pedicles, continued downwards as convergent ridges on the forehead; upper canines of male large and tusk-like. Indo-Malay countries and China.

V. Tufted Muntjacs, Genus *Elaphodus*.—Nearly related to the last, but the antlers still smaller, with shorter pedicles and divergent frontal ridges; upper canines of male not everted at the tips. Tibet and China.

VI. Water-deer, Genus *Hydrelaphus*.—Lateral metacarpals as in *Rangifer*; antlers wanting; upper canines of males tusk-like and growing from semi-persistent pulps; cheek-teeth tall-crowned (hypsodont); tail moderate. China.

VII. Roe-deer, Genus *Capreolus*.—Lateral metacarpals as in *Rangifer*; antlers rather small, without a brow-tine or sub-basal snag, dichotomously forked, with the upper or posterior prong again forking; tail rudimentary; vomer not dividing posterior nasal aperture of skull. Europe and Northern Asia.

VIII. Père David's Deer, Genus *Elaphurus*.—Lateral metacarpals as in *Cervus*; antlers large, without a brow-tine or sub-basal snag, dichotomously forked, with the upper prong of the fork curving forwards and dividing, and the lower prong long, simple, and projected backwards, the beam making a very marked angle with the plane of the face; tail very long; vomer as in *Capreolus*. North-East Asia.

IX. American Deer, Genus *Mazama*.—Lateral metacarpals as in *Rangifer*; antlers very variable in size, forming a marked angle with the plane of the face, without a brow-tine; when consisting of more than a simple prong, dichotomously forked, frequently with a sub-basal snag, and always with the lower prong of the fork projected from the front edge of the beam, in some cases the lower, in others the upper, and in others both prongs again dividing; tail long; tarsal gland generally present; metatarsal gland very variable, both as regards presence and position; vomer dividing the inner aperture of the nostrils in the skull into two distinct chambers. America.

1. White-tailed Group, Subgenus *Dorcelaphus* or *Odocoileus*.—Antlers large and complex, with a sub-basal snag, and the lower prong more or less developed at the expense of the upper one; metatarsal gland usually present; tail long or moderate, and hairy below; face very long and narrow; the face-gland small, and the gland-pit in the skull of moderate extent; no upper canines; size generally large. North America to Northern South America.

2. Marsh-deer Group, Subgenus *Blastoceros*.—Antlers large and complex, without a sub-basal snag, and the upper prong more developed than the lower one; metatarsal gland absent; tail short; face moderately long; face-gland and gland-pit well developed; upper canines usually present in male. Size large or rather small. South America.

3. Guemals, Subgenus *Xenelaphus*.—Antlers small and simple, forming a single dichotomous fork; metatarsal gland absent; tail short; face moderately long; face-gland and gland-pit well developed; upper canines present in both sexes. Size medium. South America.

4. Brockets, Subgenus *Mazama*.—Antlers in the form of simple unbranched spikes; metatarsal, and in one case also the tarsal gland absent; tail very short; face elongated; face-gland small and gland-pit deep and triangular; hair of face radiating from two whorls: upper canines sometimes present in old males. Size small. Central and South America.

X. Genus *Pudua*.—Skull and metacarpals generally as in *Mazama*; size very small; hair coarse and brittle; antlers in the form of short, simple spikes; cannon-bones very short; tail very short or wanting; no whorls in the hair of the face; face-gland moderately large, and gland-pit deep and oval; tarsal and metatarsal glands wanting; ectocuneiform bone of tarsus united with the naviculocuboid. South America.

B. Subfamily Moschinae.—Antlers wanting in both sexes; liver furnished with a gall-bladder; no face-gland or gland-pit.

XI. Musk-deer, Genus *Moschus*.—Hair coarse and brittle; upper canines of male very long; no tarsal or metatarsal glands or tufts; lateral metacarpals represented by their lower extremities; lateral hoofs very large; tail very short; naked portion of muzzle extensive; male with a large abdominal gland. Central Asia.

Of the above, Reindeer and Elk are dealt with in separate articles (*qq.v.*).

The first or typical group of the genus *Cervus* includes the red-deer (*Cervus elaphus*) of Europe and western Asia, of which there are several local races, such as the large *C. elaphus maral* of eastern Europe and Persia, which is often partially spotted above and dark-coloured below, the smaller *C. e. barbarus* of Tunisia and Morocco, and the still smaller *C. e. corsicanus* of Corsica. The Scandinavian red-deer is the typical form of the species. In all red-deer the antlers are rounded, and show a more or less marked tendency to form a cup at the summit. Wapiti, on the other hand, show a marked tendency to the flattening of the antlers, with a great development of the fourth tine, which is larger than all the others, and the whole of the tines above this in the same plane, or nearly so, this plane being the same as the long axis of the animal. Normally no cup is developed at the summit of the antler. The tail, too, is shorter than in the red-deer; while in winter the under parts become very dark, and the upper surface often bleaches almost white. The cry of the stags in the breeding season is also different. The typical representative of the group is the North American wapiti *C. canadensis*, but there are several closely allied races in Central Asia, such as *C.*

canadensis songaricus and *C. c. bactrianus*, while in Manchuria the subgroup is represented by *C. c. xanthopygus*, in which the summer coat is reddish instead of grey. The hangul (*C. cashmirianus*) of Kashmir is a distinct dark-coloured species, in which the antlers tend to turn in at the summit; while *C. yarcandensis*, of the Tarim Valley, Turkestan, is a redder animal, with a wholly rufous tail, and antlers usually terminating in a simple fork placed in a transverse plane. Another Asiatic species is the great shou (*C. affinis*) of the Chumbi Valley, in which the antlers curve forwards in a remarkable manner. Lastly *C. albirostris*, of Tibet, is easily recognized by its white muzzle, and smooth, whitish, flattened antlers, which have fewer tines than those of the other members of the group, all placed in one plane.

The second group of the genus *Cervus*, forming the subgenus *Pseudaxis*, is typified by the handsome little Japanese deer, or sika, *C.* (*P.*) *sika*, in which the antlers are four-tined, and covered with red "velvet" when first grown, while the coat is fully spotted in summer, but more or less uniformly brown in winter. The most distinctive feature of the deer of this group is, however, the patch of long erectile white hairs on the buttocks, which, although inconspicuous when the animals are quiescent, is expanded into a large chrysanthemum-like bunch when they start to run or are otherwise excited. The patch then forms a guiding signal for the members of the herd when in flight. On the mainland of Manchuria both the typical sika, and a larger race (*C. sika manchuricus*), occur. A still larger and finer animal is the Pekin sika (*C. hortulorum*), of northern Manchuria, which is as large as a small red-deer; it is represented in the Yang-tse valley by a local race, *C. h. kopschi*. Formosa possesses a species of its own (*C. taëvanus*), which, in correlation with the perpetual verdure of that island, is spotted at all seasons.

For the fallow-deer, *Cervus* [*Dama*] *dama*, see Fallow-deer.

The rusine or sambar group of *Cervus*, of which the characteristics are given above, comprises a considerable number of long-tailed species with three-tined antlers from the Indo-Malay countries and some parts of China. The largest and handsomest is the sambar of India (*Cervus* [*Rusa*] *unicolor*), characterized by its massive and rugged antlers. It is represented by a number of local races, mostly of smaller size, such as the Burmese and Malay *C. u. equinus*, the Formosan *C. u. swinhoei*, and the Philippine *C. u. philippinus* and *C. u. nigricans*, of which the latter is not larger than a roe-buck, while the sambar itself is as large as a red-deer. Whether these local phases of a single variable type are best denominated races or species, must be largely a matter of individual opinion. The rusa, or Javan sambar, *C.* (*R.*) *hippelaphus*, is a lighter-coloured and smaller deer than the Indian sambar, with longer, slenderer and less rugged antlers. Typically from Java, this deer is also represented in the Moluccas and Timor, and has thus the most easterly range of the whole tribe. A black coat with white spots distinguishes the Philippine spotted deer, *C. alfredi*, which is about the size of a roe-buck; while other members of this group are the Calamianes deer of the Philippines (*C. culionensis*), the Bavian deer (*C. kuhli*) from a small island near Java, and the well-known Indian hog-deer or para (*C. porcinus*), all these three last being small, more or less uniformly coloured, and closely allied species. On the other hand, the larger and handsomer chital, or spotted deer (*C. axis*), stands apart by its white-spotted fawn-red coat and differently formed antlers.

Nearly allied to the preceding is the barasingha or rucervine group (subgenus *Rucervus*), in which the antlers are of a different and generally more complex character. The typical species is the Indian barasingha or swamp-deer, *Cervus* (*Rucervus*) *duvauceli*, a uniformly red animal, widely distributed in the forest districts of India. In Siam it is replaced by *C.* (*R.*) *schomburgki*, in which the antlers are of a still more complex type. Finally, we have the thamin, or Eld's deer, *C.* (*R.*) *eldi*, ranging from Burma to Siam, and characterized by the continuous curve formed by the beam and the brow-tine of the antlers.

For the small eastern deer, respectively known as muntjacs (*Cervulus*) and tufted muntjacs or tufted deer (*Elaphodus*), see Muntjac; while under Water-deer will be found a notice of the Chinese representative of the genus *Hydrelaphus* (or *Hydropotes*). The roe-deer, or roe-buck (*Capreolus*), likewise form the subject of a separate article (see Roe-buck), as is also the case with Père David's deer, the sole representative of the genus *Elaphurus*.

The American deer include such New World species as are generically distinct from Old World types. All these differ from the members of the genus *Cervus* in having no brow-tine to the antlers, which, in common with those of the roe-deer, belong to what is called the forked type. Including all these deer except one in the genus *Mazama* (of which the typical representatives are the South American brockets), the North American species constitute the subgenus *Dorcelaphus* (also known as *Cariacus* and *Odocoileus*). One of the best known of these is the white-tailed deer *Mazama* (*Dorcelaphus*) *americana*, often known as the Virginian deer. It is typically an animal of the size of a fallow-deer, reddish in summer and greyish in winter, with a long tail, which is coloured like the back above but white below, and is carried elevated when the animal is running, so as to form with the white of the inner sides of the buttocks a conspicuous "blaze." A white fetlock-gland with a black centre is also distinctive of this species. The antlers are large and curve forwards, giving off an upright snag near the base, and several vertical tines from the upper surface of the horizontal portion. As we proceed southwards from the northern United States, deer of the white-tailed type decrease steadily in size, till in Central America, Peru and Guiana they are represented by animals not larger that a roe-buck. The most convenient plan appears to be to regard all these degenerate forms as local races of the white-tail, although here again there is room for difference of opinion, and many naturalists prefer to call them species. The large ears, brown-and-white face, short, black-tipped tail, and antlers without large basal snag serve to distinguish the mule-deer *M.* (*D.*) *hemionus*, of western North America; while the black tail, *M.* (*D.*) *columbiana*, ranging from British Columbia to California, is a smaller animal, recognizable by the larger and longer tail, which is black above and white below.

South America is the home of the marsh-deer or guazu, *M.* (*Blastoceros*) *dichotoma*, representing a subgenus in which the complex antlers lack a basal snag, while the hair of the back is reversed. This species is about the size of a red-deer, with a foxy red coat with black legs. The pampas-deer, *M.* (*B.*) *bezoartica*, of the Argentine pampas is a much smaller animal, of paler colour, with three-tined antlers. The Chilean and Peruvian Andes and Patagonia are the homes of two peculiar deer locally known as guemals (huemals), and constituting the subgenus *Xenelaphus*, or *Hippocamelus*. They are about the size of fallow-deer, and have

simply forked antlers. The Chilian species is *M.* (*B.*) *bisulca* and the Peruvian *M.* (*B.*) *antisiensis*. Brockets, of which there are numerous species, such as *M. rufa* and *M. nemorivaga*, are Central and South American deer of the size of roe-bucks or smaller, with simple spike-like antlers, tufted heads and the hair of the face radiating from two whorls on the forehead so that on the nose the direction is downwards. The smallest of all deer is the Chilian pudu (*Pudua pudu*), a creature not much larger than a hare, with almost rudimentary antlers.

The musk-deer forms the subject of a separate article.

For deer in general, see R. Lydekker, *The Deer of all Lands* (London, 1898, 1908).

(R. L.*)

DEERFIELD, a township of Franklin county, Massachusetts, U.S.A., on the Connecticut and Deerfield rivers, about 33 m. N. of Springfield. Pop. (1900) 1969; (1910 U.S. census) 2209. Deerfield is served by the Boston & Maine and the New York, New Haven & Hartford railways. The natural beauty and the historic interest of Deerfield attract many visitors. There are several villages and hamlets in the township, the oldest and most interesting of which is that known as “The Street” or “Old Street.” This extends along one wide thoroughfare over a hill and across a plateau or valley that is hemmed in on the E. by a range of highlands known as East Mountain and on the W. by the foothills of Hoosac Mountain. Many of the houses in this village are very old. In Memorial Hall, a building erected in 1797-1798 for the Deerfield academy, the Pocumtuck Valley memorial association (incorporated in 1870) has gathered an interesting collection of colonial and Indian relics. Deerfield was one of the first places in the United States to enter into the modern “arts and crafts movement”; in 1896 many of the old household industries were revived and placed upon a business basis. Most of the work is done by women in the homes. The products, including needlework and embroidery, textiles, rag rugs, netting, wrought iron, furniture, and metal-work in gold and silver embellished with precious and semi-precious stones, are annually exhibited in an old-fashioned house built in 1710, and a large portion of them are sold to tourists. There is an arts and crafts society, but the profits from the sales go entirely to the workers.

The territory which originally constituted the township of Deerfield (known as Pocumtuck until 1674) was a tract of 8000 acres granted in 1654 to the town of Dedham in lieu of 2000 acres previously taken from that town and granted to Rev. John Eliot to further his mission among the Natick Indians. The rights of the Pocumtuck Indians to the Deerfield tract were purchased at about fourpence per acre, settlement was begun upon it in 1669, and the township was incorporated in 1673. For many years, Deerfield was the N.W. frontier settlement of New England. It was slightly fortified at the beginning of King Philip’s War, and after an attack by the Indians on the 1st of September 1675 it was garrisoned by a small force under Captain Samuel Appleton. A second attack was made on the 12th of September, and six days later, as Captain Thomas Lothrop and his company were guarding teams that were hauling wheat from Deerfield to the English headquarters at Hadley, they were surprised by Indians in ambush at what has since been known as Bloody Brook (in the village of South Deerfield), and Lothrop and more than sixty of his men were slain. From this time until the end of the war Deerfield was abandoned. In the spring of 1677 a few of the old settlers returned, but on the 19th of September some were killed and the others were captured by a party of Indians from Canada. Resettlement was undertaken again in 1682. On the 15th of September 1694 Deerfield narrowly escaped capture by a force of French and Indians from Canada. In the early morning of the 29th of February 1703-1704, Deerfield was surprised by a force of French and Indians (under Hertel de Rouville), who murdered 49 men, women and children, captured 111, burned the town, and on the way back to Canada murdered 20 of the captured. Among the captives was the Rev. John Williams (1664-1729), the first minister of Deerfield, who (with the other captives) was redeemed in 1706 and continued as pastor here until his death; in 1707 he published an account of his experiences as a prisoner, *The Redeemed Captive Returning to Zion*, which has frequently been reprinted. From the original township of Deerfield the territory of the following townships has been taken: Greenfield (1753 and 1896), Conway (1767, 1791 and 1811), Shelburne (1768) and a part of Whately (1810).

See George Sheldon, *A History of Deerfield* (Deerfield, 1895); the *History and Proceedings of the Pocumtuck Valley Memorial Association* (Deerfield, 1890 et seq.); and Pauline C. Bouvé, “The Deerfield Renaissance,” in *The New England Magazine* for October 1905.

DEER PARK, an enclosure of rough wooded pastureland for the accommodation of red- or fallow-deer. The distinction between a deer “park” and a deer “forest” is that the former is always enclosed either by a wall or fence, and is relatively small, whereas the forest covers a much larger area, and is not only open but sometimes contains practically no trees at all. Originally, the possession of a deer park in England was a royal prerogative, and no subject could enclose one without a direct grant from the crown—a licence to impark, like a licence to embattle a house, was always necessary. When Domesday Book was compiled, there were already thirty-one deer parks in England, some of which may have existed in Saxon times; about one-fourth of them belonged to the king. After the Conquest they increased rapidly in number, but from about the middle of the 11th century this tendency was reversed. In the middle of the 16th century it was conjectured that one-twentieth of England and Wales was given up to deer and rabbits. Upon Saxton’s maps, which were made between 1575 and 1580, over 700 parks are marked, and it is not improbable that the number was

understated. Mr Evelyn Philip Shirley enumerated only 334 in his book on *English Deer Parks* published in 1867. To these Mr Joseph Whitaker, in *A Descriptive List of the Deer Parks of England* (1892), has added another fifty, and the total is believed to be now about 400. It is a curious circumstance that despite the rather minute detail of Domesday none of the parks there enumerated can now be identified. There is, however, a plausible case for Eridge Park in Sussex as the Reredfelle of Domesday. The state and consequence of the great barons of the middle ages depended in some measure upon the number of deer parks which they possessed. Most bishops and abbots had one or two, and at one time more than twenty were attached to the archbishopric of Canterbury. When the power of the barons was finally broken and a more settled period began with the accession of the house of Tudor, the deer park began to fall into decay. By Queen Elizabeth's time a considerable proportion of the ancestral acres of the great houses had passed into the possession of rich merchants and wealthy wool-staplers, and it had become more profitable to breed bullocks than to find pasture for deer, and even where the new men retained, and even in some cases created, deer parks, they reduced their area in order that more land might be available for grazing or for corn. Thus began that decadence of the deer park which has continued down to the present time. More than anything, however, the strife between Charles I. and parliament contributed to reduce both the number and size of English parks containing deer. By the Restoration the majority of the parks in England had for the time being been destroyed, the palings pulled down, the trees felled, and the deer stolen. Of the duke of Newcastle's eight parks seven were ruined, that at Welbeck alone remaining intact. Not a tree was left in Clipston Park, although the timber had been valued at £20,000. One of the results of the Restoration was to empty the parks of the Roundhead squires to replenish those of the Royalists, but this measure helped little, and great numbers of deer had to be brought from Germany to replenish the depleted stocks. A gentleman of the Isle of Ely was indeed given a baronetcy in return for a large present of deer which he made to Charles II. The largest existing deer park in England is that at Savernake (4000 acres), next comes Windsor, which contains about 2600 acres in addition to the 1450 acres of Windsor Forest. Lord Egerton of Tatton's park at Tatton in Cheshire, and Lord Abergavenny's at Eridge, each contain about 2500 acres. Other parks which are much about the same size are those of Blenheim, Richmond, Eastwell, Duncombe, Grimsthorpe, Thoresby and Knowsley. All these parks are famous either for their size, their beauty, or the number and long descent of the deer which inhabit them. The size of English parks devoted to deer varies from that of these historic examples down to a very few acres. A small proportion of the older enclosures contains red- as well as fallow-deer. In some of the larger ones many hundreds of head browse, whereas those of the smallest size may have only a dozen or two. Although many enclosures were disparked in very recent times, the 19th century saw the making of a considerable number of new ones, usually of small dimensions. The tendency, however, is still towards diminution both in number and extent, cattle taking the place of deer.

DEFAMATION (from the classical Lat. *diffamare*, to spread abroad an evil report—the English form in *de* is taken from the Late Lat. *defamare*), the saying or writing something of another, calculated to injure his reputation or expose him to public hatred, contempt and ridicule. (See Libel and Slander.)

DEFAULT (Fr. *défaut*, from *défailler*, to fail, Lat. *fallere*), in English law, a failure to do some act required by law either as a regular step in procedure or as being a duty imposed. Parties in an action may be in default as to procedure by failure to appear to the writ, or to take some other step, within the prescribed time. In such cases the opposing party gains some advantage by being allowed to sign judgment or otherwise. But as a rule, unless the party is much in default and is under a peremptory order to proceed, the penalty for default is by order to pay the costs occasioned. When there is default in complying with the terms of a judgment the remedy is by executing it by one of the processes admitted by the law. (See Execution.) In the case of judgments in criminal or quasi-criminal cases, where a fine is imposed, it is in most cases legal and usual to order imprisonment if the fine is not paid or if the property of the defendant is insufficient to realize its amount. Default in compliance with a statute renders the defaulter liable to action by the person aggrieved or to indictment if the matter of command is of public concern, subject in either case to the qualification that the statute may limit the remedy for the default to some particular proceeding specifically indicated; and in some instances, *e.g.* in the case of local authorities, default in the execution of their public duties is dealt with administratively by a department of the government, and only in the last resort, if at all, by recourse to judicial tribunals.

DEFEASANCE, or Defeazance (Fr. *défaire*, to undo), in law, an instrument which defeats the force or operation of some other deed or estate; as distinguished from *condition*, that which in the same deed is called a condition is a defeasance in another deed. A defeasance should recite the deed to be defeated and its date, and it must be made between the same parties as are interested in the deed to which it is collateral. It must be of a thing defeasible, and all the conditions must be strictly carried out before the defeasance can be consummated. Defeasance in a bill of sale is the putting an end to the security by realizing the goods for the benefit of the mortgagee. It is not strictly a defeasance, because the stipulation is in the same deed; it is

really a condition in the nature of a defeasance.

DEFENCE (Lat. *defendere*, to defend), in general, a keeping off or defending, a justification, protection or guard. Physical defence of self is the right of every man, even to the employment of force, in warding off an attack. A person attacked may use such force as he believes to be necessary for the warding off an attack, even to the extent of killing an assailant. The same right of reciprocal defence extends not only to defence of one's own person, but also to the defence of a husband or wife, parent or child, master or servant. (See Assault; Homicide.) As a legal term in English pleading, "defence" means the denial by the party proceeded against of the validity of a charge, or the steps taken by an accused person or his legal advisers for defending himself. In civil actions, a statement of defence is the second step in proceedings, being the answer of the defendant to the plaintiff's statement of claim. In the statement of defence must be set out every material fact upon which the defendant intends to rely at the trial. Every fact alleged in the statement of claim must be dealt with, and either admitted or denied; further facts may be pleaded in answer to those admitted; the whole pleading of the plaintiff may be objected to as insufficient in law, or a set-off or counter-claim may be advanced. A statement of defence must be delivered within ten days from the delivery of the statement of claim, or appearance if no statement of claim be delivered.

By the Poor Prisoners' Defence Act 1903, where it appears, having regard to the nature of the defence set up by any poor prisoner, as disclosed in the evidence given or statement made by him before the committing justices, that it is desirable in the interests of justice that he should have legal aid in the preparation and conduct of his defence, and that his means are insufficient to enable him to obtain such aid, it may be ordered either (1) on committal for trial by the committing justices, or (2) after reading the depositions by the judge or quarter sessions chairman. The defence includes the services of solicitor and counsel and the expenses of witnesses, the cost being payable in the same manner as the expenses of a prosecution for felony. Briefly, the object of the act is, not to give a prisoner legal assistance to find out if he has got a defence, but in order that a prisoner who has a defence may have every inducement to tell the truth about it at the earliest opportunity. Legal assistance under the act is only given where both (1) the nature of the defence as disclosed is such that in the interests of justice the prisoner should have legal aid to make his defence clear, and (2) where also his means are insufficient for that end (Lord Alverstone, C. J., at Warwick Summer Assizes, *The Times*, July 26, 1904).

DEFENDANT, in law, a person against whom proceedings are instituted or directed; one who is called upon to answer in any suit. At one time the term "defendant" had a narrower meaning, that of a person sued in a personal action only, the corresponding term in a real action being "tenant," but the distinction is now practically disregarded, except in a few states of the United States.

DEFENDER OF THE FAITH (*Fidei Defensor*), a title belonging to the sovereign of England in the same way as *Christianissimus* belonged to the king of France, and *Catholicus* belongs to the ruler of Spain. It seems to have been suggested in 1516, and although certain charters have been appealed to in proof of an earlier use of the title, it was first conferred by Pope Leo X. on Henry VIII. The Bull granting the title is dated the 11th of October 1521, and was a reward for the king's treatise, *Assertio, septem sacramentorum*, against Luther. When Henry broke with the papacy, Pope Paul III. deprived him of this designation, but in 1544 the title of "Defender of the Faith" was confirmed to Henry by parliament, and has since been used by all his successors on the English throne.

DEFERENT (Lat. *deferens*, bearing down), in ancient astronomy, the mean orbit of a planet, which carried the epicycle in which the planet revolved. It is now known to correspond to the actual orbit of the planet round the sun.

DEFFAND, MARIE ANNE DE VICHY-CHAMROND, Marquise du (1697-1780), a celebrated Frenchwoman, was born at the chateau of Chamrond near Charolles (department of Saône-et-Loire) of a

noble family in 1697. Educated at a convent in Paris, she showed, along with great intelligence, a sceptical and cynical turn of mind. The abbess, alarmed at the freedom of her views, arranged that Massillon should visit and reason with her, but he accomplished nothing. Her parents married her at twenty-one years of age to her kinsman, Jean Baptiste de la Lande, marquis du Deffand, without consulting her inclination. The union proved an unhappy one, and resulted in a separation as early as 1722. Madame du Deffand, young and beautiful, is said by Horace Walpole to have been for a short time the mistress of the regent, the duke of Orleans (Walpole to Gray, January 25, 1766). She appeared in her earlier days to be incapable of any strong attachment, but her intelligence, her cynicism and her *esprit* made her the centre of attraction of a brilliant circle. In 1721 began her friendship with Voltaire, but their regular correspondence dates only from 1736. She spent much time at Sceaux, at the court of the duchesse du Maine, where she contracted a close friendship with the president Hénault. In Paris she was in a sense the rival of Madame Geoffrin, but the members of her salon were drawn from aristocratic society more than from literary cliques. There were, however, exceptions. Voltaire, Montesquieu, Fontenelle and Madame de Staal-Delaunay were among the habitués. When Hénault introduced D'Alembert, Madame du Deffand was at once captivated by him. With the encyclopaedists she was never in sympathy, and appears to have tolerated them only for his sake. In 1752 she retired from Paris, intending to spend the rest of her days in the country, but she was persuaded by her friends to return. She had taken up her abode in 1747 in apartments in the convent of St Joseph in the rue St Dominique, which had a separate entrance from the street. When she lost her sight in 1754 she engaged Mademoiselle de Lespinasse to help her in entertaining. This lady's wit made some of the guests, D'Alembert among others, prefer her society to that of Madame du Deffand, and she arranged to receive her friends for an hour before the appearance of her patron. When this state of things was discovered Mademoiselle de Lespinasse was dismissed (1764), but the salon was broken up, for she took with her D'Alembert, Turgot and the literary clique generally. From this time Madame du Deffand very rarely received any literary men. The principal friendships of her later years were with the duchesse de Choiseul and with Horace Walpole. Her affection for the latter, which dated from 1765, was the strongest and most durable of all her attachments. Under the stress of this tardy passion she developed qualities of style and eloquence of which her earlier writings had given little promise. In the opinion of Sainte-Beuve the prose of her letters ranks with that of Voltaire as the best of that classical epoch without excepting any even of the great writers. Walpole refused at first to acknowledge the closeness of their intimacy from an exaggerated fear of the ridicule attaching to her age, but he paid several visits to Paris expressly for the purpose of enjoying her society, and maintained a close and most interesting correspondence with her for fifteen years. She died on the 23rd of September 1780, leaving her dog Tonton to the care of Walpole, who was also entrusted with her papers. Of her innumerable witty sayings the best known is her remark on the cardinal de Polignac's account of St Denis's miraculous walk of two miles with his head in his hands,—*Il n'y a que le premier pas qui coûte*.

The *Correspondance inédite* of Madame du Deffand with D'Alembert, Hénault, Montesquieu, and others was published in Paris (2 vols.) in 1809. *Letters of the marquise du Deffand to the Hon. Horace Walpole, afterwards earl of Orford, from the year 1766 to the year 1780* (4 vols.), edited, with a biographical sketch, by Miss Mary Berry, were published in London from the originals at Strawberry Hill in 1810.

The standard edition of her letters is the *Correspondance complète de la marquise du Deffand ...* by M. de Lescure (1865); the *Correspondance inédite* with M. and Mme de Choiseul and others was edited in 1859 and again in 1866 by the marquis de Ste-Aulaire. Other papers of Madame du Deffand obtained at the breaking up of Walpole's collection are in private hands. Madame du Deffand returned many of Walpole's letters at his request, and subsequently destroyed those which she received from him. Those in his possession appear to have been destroyed after his death by Miss Berry, who printed fragments from them as footnotes to the edition of 1810. The correspondence between Walpole and Madame du Deffand thus remains one-sided, but seven of Walpole's letters to her are printed for the first time in the edition (1903) of his correspondence by Mrs Paget Toynbee, who discovered a quantity of her unedited letters. See Sainte-Beuve, *Causeries du lundi*, vols. i. and xiv.; and the notice by M. de Lescure in his edition of the correspondence.

DEFIANCE, a city and the county seat of Defiance county, Ohio, U.S.A., at the confluence of the Auglaize and Tiffin rivers with the Maumee, about 50 m. S.W. of Toledo. Pop. (1890) 7694; (1900) 7579 (960 foreign-born); (1910) 7327. It is served by the Baltimore & Ohio and the Wabash railways, and by the Ohio Electric railway to Lima (42 m.). The city commands a fine view of the rivers and the surrounding country, which is well adapted to agriculture; and has large machine shops and several flour mills, besides manufactories of agricultural implements, waggons, sashes and blinds, and wood-working machinery for the manufacture of artillery wheels. Here, too, is Defiance College, an institution of the Christian Denomination, opened in 1885. Defiance was long the site of an Indian village. In 1794 General Anthony Wayne built a fort here and named it Defiance. In 1822 Defiance was laid out as a town; in 1845 it was made the county seat of the newly erected county; and in 1881 it became a city of the second class.

DEFILE, a military expression for a passage, to march through which troops are compelled to "defile," or narrow their front (from the Fr. *défiler*, to march in a line, or by "files"). The word is usually applied to a ravine or gorge in a range of hills, but a causeway over a river, a bridge and even a village may equally be called a defile. The term is also used to express, without any special reference to military operations, a gorge in mountains. The verb "to defile" is used of troops marching on a narrow front, or narrowing their front, under all circumstances, and in this sense is the contrary of "deploy."

"Defile," in the sense of "pollute," is another form of "defoul"; though spelt alike, the two words are pronounced differently, the accent being on the first syllable for the former and on the second for the latter.

DEFINITION (Lat. *definitio*, from *de-finire*, to set limits to, describe), a logical term used popularly for the process of explaining, or giving the meaning of, a word, and also in the concrete for the proposition or statement in which that explanation is expressed. In logic, definition consists in determining the qualities which belong to given concepts or universals; it is not concerned with individuals, which are marked by an infinity of peculiarities, any one or all of which might be predicated of another individual. Individuals can be defined only in so far as they belong to a single kind. According to Aristotle, definition is the statement of the essence of a concept (ὁρισμὸς μὲν γὰν τοῦ τί ἐστι καὶ οὐσίας, *Posterior Analytics*, B iii. 90 b 30); that is, it consists of the genus and the differentia. In other words, "man" is defined as "animal *plus* rationality," or "rational animal,"[1] *i.e.* the concept is (1) referred to the next higher genus, and (2) distinguished from other modes in which that genus exists, *i.e.* from other species. It is sometimes argued that, there being no definition of individuals as such, definition is of names (see J. S. Mill, *Logic*, i. viii. 5), not of things; it is generally, however, maintained that definition is *of things, regarded as, or in so far as they are, of a kind*. 927
Definition of words can be nothing more than the explanation of terms such as is given in a dictionary.

The following rules are generally given as governing accurate definition. (1) *The definition must be equivalent or commensurate with that which is defined*; it must be applicable to all the individuals included in the concept and to nothing else. Every man, and nothing else, is a rational animal. "Man is mortal" is not a definition, for mortality is predicable of irrational animals. (2) *The definition must state the essential attributes*; a concept cannot be defined by its accidental attributes; those attributes must be given which are essential and primary. (3) *The definition must be per genus et differentiam* (or *differentias*), as we have already seen. These are the important rules. Three minor rules are: (4) *The definition must not contain the name of the concept to be defined*; if it does, no information is given. Such a proposition as "an archdeacon is one who performs archidiaconal functions" is not a definition. Concepts cannot be defined by their correlatives. Such a definition is known as a *circulus in definiendo*. (5) *Obscure and figurative language must be avoided*, and (6) *Definitions must not be in the negative when they can be in the affirmative*.

1 "Rational animal" is thus the predicate of the statement constituting the definition. Sometimes the word "definition" is used to signify merely the predicate.

DEFOE, DANIEL (*c.* 1659-1731), English author, was born in the parish of St Giles, Cripplegate, London, in the latter part of 1659 or early in 1660, of a nonconformist family. His grandfather, Daniel Foe, lived at Etton, Northamptonshire, apparently in comfortable circumstances, for he is said to have kept a pack of hounds. As to the variation of name, Defoe or Foe, its owner signed either indifferently till late in life, and where his initials occur they are sometimes D. F. and sometimes D. D. F. Three autograph letters of his are extant, all addressed in 1705 to the same person, and signed respectively D. Foe, de Foe and Daniel Defoe. His father, James Foe, was a butcher and a citizen of London.

Daniel was well educated at a famous dissenting academy, Mr Charles Morton's of Stoke Newington, where many of the best-known nonconformists of the time were his schoolfellows. With few exceptions all the known events of Defoe's life are connected with authorship. In the older catalogues of his works two pamphlets, *Speculum Crapegownorum*, a satire on the clergy, and *A Treatise against the Turks*, are attributed to him before the accession of James II., but there seems to be no publication of his which is certainly genuine before *The Character of Dr Annesley* (1697). He had, however, before this, taken up arms in Monmouth's expedition, and is supposed to have owed his lucky escape from the clutches of the king's troops and the law, to his being a Londoner, and therefore a stranger in the west country. On the 26th of January 1688 he was admitted a liveryman of the city of London, having claimed his freedom by birth. Before his western escapade he had taken up the business of hosiery factor. At the entry of William and Mary into London he is said to have served as a volunteer trooper "gallantly mounted and richly accoutred." In these days he lived at Tooting, and was instrumental in forming a dissenting congregation there. His business operations at this period appear to have been extensive and various. He seems to have been a sort of commission merchant, especially in Spanish and Portuguese goods, and at some time to have visited Spain on business. In 1692 he failed for £17,000. His misfortunes made him write both feelingly and forcibly on the bankruptcy laws; and although his creditors accepted a composition, he afterwards honourably paid them in full, a fact attested by independent and not very friendly witnesses. Subsequently, he undertook first the secretaryship and then the management and chief ownership of some tile-works at Tilbury, but here also he was unfortunate, and his imprisonment in 1703 brought the works to a standstill, and he lost £3000. From this time forward we hear of no settled business in which he engaged.

The course of Defoe's life was determined about the middle of the reign of William III. by his introduction to that monarch and other influential persons. He frequently boasts of his personal intimacy with the "glorious and immortal" king, and in 1695 he was appointed accountant to the commissioners of the glass duty, an office which he held for four years. During this time he produced his *Essay on Projects* (1698), containing suggestions on banks, road-management, friendly and insurance societies of various kinds, idiot asylums, bankruptcy, academies, military colleges, high schools for women, &c. It displays Defoe's lively and lucid

style in full vigour, and abounds with ingenious thoughts and apt illustrations, though it illustrates also the unsystematic character of his mind. In the same year Defoe wrote the first of a long series of pamphlets on the then burning question of occasional conformity. In this, for the first time, he showed the unlucky independence which, in so many other instances, united all parties against him. While he pointed out to the dissenters the scandalous inconsistency of their playing fast and loose with sacred things, yet he denounced the impropriety of requiring tests at all. In support of the government he published, in 1698, *An Argument for a Standing Army*, followed in 1700 by a defence of William's war policy called *The Two Great Questions considered*, and a set of pamphlets on the Partition Treaty. Thus in political matters he had the same fate as in ecclesiastical; for the Whigs were no more prepared than the Tories to support William through thick and thin. He also dealt with the questions of stock-jobbing and of electioneering corruption. But his most remarkable publication at this time was *The True-Born Englishman* (1701), a satire in rough but extremely vigorous verse on the national objection to William as a foreigner, and on the claim of purity of blood for a nation which Defoe chooses to represent as crossed and dashed with all the strains and races in Europe. He also took a prominent part in the proceedings which followed the Kentish petition, and was the author, some say the presenter, of the *Legion Memorial*, which asserted in the strongest terms the supremacy of the electors over the elected, and of which even an irate House of Commons did not dare to take much notice. The theory of the indefeasible supremacy of the freeholders of England, whose delegates merely, according to this theory, the Commons were, was one of Defoe's favourite political tenets, and he returned to it in a powerfully written tract entitled *The Original Power of the Collective Body of the People of England examined and asserted* (1701).

At the same time he was occupied in a controversy on the conformity question with John How (or Howe) on the practice of "occasional conformity." Defoe maintained that the dissenters who attended the services of the English Church on particular occasions to qualify themselves for office were guilty of inconsistency. At the same time he did not argue for the complete abolition of the tests, but desired that they should be so framed as to make it possible for most Protestants conscientiously to subscribe to them. Here again his moderation pleased neither party.

The death of William was a great misfortune to Defoe, and he soon felt the power of his adversaries. After publishing *The Mock Mourners*, intended to satirize and rebuke the outbreak of Jacobite joy at the king's death, he turned his attention once more to ecclesiastical subjects, and, in an evil hour for himself, wrote the anonymous *Shortest Way with the Dissenters* (1702), a statement in the most forcible terms of the extreme "high-flying" position, which some high churchmen were unwary enough to endorse, without any suspicion of the writer's ironical intention. The author was soon discovered; and, as he absconded, an advertisement was issued offering a reward for his apprehension, and giving the only personal description we possess of him, as "a middle-sized spare man about forty years old, of a brown complexion and dark brown-coloured hair, but wears a wig; a hooked nose, a sharp chin, grey eyes, and a large mole near his mouth." In this conjuncture Defoe had really no friends, for the dissenters were as much alarmed at his book as the high-flyers were irritated. He surrendered, and his defence appears to have been injudiciously conducted; at any rate he was fined 200 marks, and condemned to be pilloried three times, to be imprisoned indefinitely, and to find sureties for his good behaviour during seven years. It was in reference to this incident that Pope, whose Catholic rearing made him detest the abettor of the Revolution and the champion of William of Orange, wrote in the *Dunciad*—

"Earless on high stands unabash'd Defoe"

—though he knew that the sentence to the pillory had long ceased to entail the loss of ears. Defoe's exposure in the pillory (July 29, 30, 31) was, however, rather a triumph than a punishment, for the populace took his side; and his *Hymn to the Pillory*, which he soon after published, is one of the best of his poetical works. Unluckily for him his condemnation had the indirect effect of destroying his business at Tilbury.

He remained in prison until August 1704, and then owed his release to the intercession of Robert Harley, who represented his case to the queen, and obtained for him not only liberty but pecuniary relief and employment, which, of one kind or another, lasted until the termination of Anne's reign. Defoe was uniformly grateful to the minister, and his language respecting him is in curious variance with that generally used. There is no doubt that Harley, who understood the influence wielded by Defoe, made some conditions. Defoe says he received no pension, but his subsequent fidelity was at all events indirectly rewarded; moreover, Harley's moderation in a time of the extremest party-insanity was no little recommendation to Defoe. During his imprisonment he was by no means idle. A spurious edition of his works having been issued, he himself produced a collection of twenty-two treatises, to which some time afterwards he added a second group of eighteen more. He also wrote in prison many short pamphlets, chiefly controversial, published a curious work on the famous storm of the 26th of November 1703, and started in February 1704 perhaps the most remarkable of all his projects, *The Review*. This was a paper which was issued during the greater part of its life three times a week. It was entirely written by Defoe, and extends to eight complete volumes and some few score numbers of a second issue. He did not confine himself to news, but wrote something very like finished essays on questions of policy, trade and domestic concerns; he also introduced a "Scandal Club," in which minor questions of manners and morals were treated in a way which undoubtedly suggested the *Tatlers* and *Spectators* which followed. Only one complete copy of the work is known to exist, and that is in the British Museum. It is probable that if bulk, rapidity of production, variety of matter, originality of design, and excellence of style be taken together, hardly any author can show a work of equal magnitude. After his release Defoe went to Bury St Edmunds, though he did not interrupt either his *Review* or his occasional pamphlets. One of these, *Giving Alms no Charity, and Employing the Poor a Grievance to the Nation* (1704), is extraordinarily far-sighted. It denounces both indiscriminate alms-giving and the national work-shops proposed by Sir Humphrey Mackworth.

In 1705 appeared *The Consolidator, or Memoirs of Sundry Transactions from the World in the Moon*, a political satire which is supposed to have given some hints for Swift's *Gulliver's Travels*; and at the end of the year Defoe performed a secret mission, the first of several of the kind, for Harley. In 1706 appeared the *True Relation of the Apparition of one Mrs Veal*, long supposed to have been written for a bookseller to help off an

unsaleable translation of Drelincourt, *On Death*, but considerable doubt has been cast upon this by William Lee. Defoe's next work was *Jure divino*, a long poetical argument in (bad) verse; and soon afterwards (1706) he began to be much employed in promoting the union with Scotland. Not only did he write pamphlets as usual on the project, and vigorously recommend it in *The Review*, but in October 1706 he was sent on a political mission to Scotland by Sidney Godolphin, to whom Harley had recommended him. He resided in Edinburgh for nearly sixteen months, and his services to the government were repaid by a regular salary. He seems to have devoted himself to commercial and literary as well as to political matters, and prepared at this time his elaborate *History of the Union*, which appeared in 1709. In this year Henry Sacheverell delivered his famous sermons, and Defoe wrote several tracts about them and attacked the preacher in his *Review*.

In 1710 Harley returned to power, and Defoe was placed in a somewhat awkward position. To Harley himself he was bound by gratitude and by a substantial agreement in principle, but with the rest of the Tory ministry he had no sympathy. He seems, in fact, to have agreed with the foreign policy of the Tories and with the home policy of the Whigs, and naturally incurred the reproach of time-serving and the hearty abuse of both parties. At the end of 1710 he again visited Scotland. In the negotiations concerning the Peace of Utrecht, Defoe strongly supported the ministerial side, to the intense wrath of the Whigs, displayed in an attempted prosecution against some pamphlets of his on the all-important question of the succession. Again the influence of Harley saved him. He continued, however, to take the side of the dissenters in the questions affecting religious liberty, which played such a prominent part towards the close of Anne's reign. He naturally shared Harley's downfall; and, though the loss of his salary might seem a poor reward for his constant support of the Hanoverian claim, it was little more than his ambiguous, not to say trimming, position must have led him to expect.

Defoe declared that Lord Annesley was preparing the army in Ireland to join a Jacobite rebellion, and was indicted for libel; and prior to his trial (1715) he published an apologia entitled *An Appeal to Honour and Justice*, in which he defended his political conduct. Having been convicted of the libel he was liberated later in the year under circumstances that only became clear in 1864, when six letters were discovered in the Record Office from Defoe to a Government official, Charles Delafaye, which, according to William Lee, established the fact that in 1718 at least Defoe was doing not only political work, but that it was of a somewhat equivocal kind—that he was, in fact, sub-editing the Jacobite *Mist's Journal*, under a secret agreement with the government that he should tone down the sentiments and omit objectionable items. He had, in fact, been released on condition of becoming a government agent. He seems to have performed the same not very honourable office in the case of two other journals—*Dormer's Letter* and the *Mercurius Politicus*; and to have written in these and other papers until nearly the end of his life. Before these letters were discovered it was supposed that Defoe's political work had ended in 1715.

Up to that time Defoe had written nothing but occasional literature, and, except the *History of the Union* and *Jure Divino*, nothing of any great length. In 1715 appeared the first volume of *The Family Instructor*, which was very popular during the 18th century. The first volume of his most famous work, the immortal story—partly adventure, partly moralizing—of *The Life and Strange Surprizing Adventures of Robinson Crusoe*, was published on the 25th of April 1719. It ran through four editions in as many months, and then in August appeared the second volume. Twelve months afterwards the sequel *Serious Reflections*, now hardly ever reprinted, appeared. Its connexion with the two former parts is little more than nominal, Crusoe being simply made the mouth-piece of Defoe's sentiments on various points of morals and religion. Meanwhile the first two parts were reprinted as a *feuilleton* in *Heathcote's Intelligencer*, perhaps the earliest instance of the appearance of such a work in such a form. The story was founded on Dempier's *Voyage round the World* (1697), and still more on Alexander Selkirk's adventures, as communicated by Selkirk himself at a meeting with Defoe at the house of Mrs Damaris Daniel at Bristol. Selkirk afterwards told Mrs Daniel that he had handed over his papers to Defoe. *Robinson Crusoe* was immediately popular, and a wild story was set afloat of its having been written by Lord Oxford in the Tower. A curious idea, at one time revived by Henry Kingsley, is that the adventures of Robinson are allegorical and relate to Defoe's own life. This idea was certainly entertained to some extent at the time, and derives some colour of justification from words of Defoe's, but there seems to be no serious foundation for it. *Robinson Crusoe* (especially the story part, with the philosophical and religious moralizings largely cut out) is one of the world's classics in fiction. Crusoe's shipwreck and adventures, his finding the footprint in the sand, his man "Friday,"—the whole atmosphere of romance which surrounds the position of the civilized man fending for himself on a desert island—these have made Defoe's great work an imperishable part of English literature. Contemporaneously appeared *The Dumb Philosopher*, or *Dickory Cronke*, who gains the power of speech at the end of his life and uses it to predict the course of European affairs.

In 1720 came *The Life and Adventures of Mr Duncan Campbell*. This was not entirely a work of imagination, its hero, the fortune-teller, being a real person. There are amusing passages in the story, but it is too desultory to rank with Defoe's best. In the same year appeared two wholly or partially fictitious histories, each of which might have made a reputation for any man. The first was the *Memoirs of a Cavalier*, which Lord Chatham believed to be true history, and which William Lee considers the embodiment at least of authentic private memoirs. The Cavalier was declared at the time to be Andrew Newport, made Lord Newport in 1642. His elder brother was born in 1620 and the Cavalier gives 1608 as the date of his birth, so that the facts do not fit the dates. It is probable that Defoe, with his extensive acquaintance with English history, and his astonishing power of working up details, was fully equal to the task of inventing it. As a model of historical work of a certain kind it is hardly surpassable, and many separate passages—accounts of battles and skirmishes—have never been equalled except by Carlyle. *Captain Singleton*, the last work of the year, has been unjustly depreciated by most of the commentators. The record of the journey across Africa, with its surprising anticipations of subsequent discoveries, yields in interest to no work of the kind known to us; and the semi-piratical Quaker who accompanies Singleton in his buccaneering expeditions is a most life-like character. There is also a Quaker who plays a very creditable part in *Roxana* (1724), and Defoe seems to have been well affected to the Friends. In estimating this wonderful productiveness on the part of a man sixty years old, it should be remembered that it was a habit of Defoe's to keep his work in manuscript sometimes for long periods.

In 1721 nothing of importance was produced, but in the next twelvemonth three capital works appeared. These were *The Fortunes and Misfortunes of Moll Flanders*, *The Journal of the Plague Year*, and *The History of Colonel Jack*. *Moll Flanders* and *The Fortunate Mistress* (Roxana), which followed in 1724, have subjects of a rather more than questionable character, but both display the remarkable art with which Defoe handles such subjects. It is not true, as is sometimes said, that the difference between the two is that between gross and polished vice. The real difference is much more one of morals than of manners. Moll is by no means of the lowest class. Notwithstanding the greater degradation into which she falls, and her originally dependent position, she has been well educated, and has consorted with persons of gentle birth. She displays throughout much greater real refinement of feeling than the more high-flying Roxana, and is at any rate flesh and blood, if the flesh be somewhat frail and the blood somewhat hot. Neither of the heroines has any but the rudiments of a moral sense; but Roxana, both in her original transgression and in her subsequent conduct, is actuated merely by avarice and selfishness—vices which are peculiarly offensive in connexion with her other failing, and which make her thoroughly repulsive. The art of both stories is great, and that of the episode of the daughter Susannah in *Roxana* is consummate; but the transitions of the later plot are less natural than those in *Moll Flanders*. It is only fair to notice that while the latter, according to Defoe's more usual practice, is allowed to repent and end happily, Roxana is brought to complete misery; Defoe's morality, therefore, required more repulsiveness in one case than in the other.

In the *Journal of the Plague Year*, more usually called, from the title of the second edition, *A History of the Plague*, the accuracy and apparent veracity of the details is so great that many persons have taken it for an authentic record, while others have contended for the existence of such a record as its basis. But here too the genius of Mrs Veal's creator must, in the absence of all evidence to the contrary, be allowed sufficient for the task. *The History of Colonel Jack* is an unequal book. There is hardly in *Robinson Crusoe* a scene equal, and there is consequently not in English literature a scene superior, to that where the youthful pickpocket first exercises his trade, and then for a time loses his ill-gotten gains. But a great part of the book, especially the latter portion, is dull; and in fact it may be generally remarked of Defoe that the conclusions of his tales are not equal to the beginning, perhaps from the restless indefatigability with which he undertook one work almost before finishing another.

To this period belong his stories of famous criminals, of Jack Sheppard (1724), of Jonathan Wild (1725), of the Highland Rogue *i.e.* Rob Roy (1723). The pamphlet on the first of these Defoe maintained to be a transcript of a paper which he persuaded Sheppard to give to a friend at his execution.

In 1724 appeared also the first volume of *A Tour through the whole Island of Great Britain*, which was completed in the two following years. Much of the information in this was derived from personal experience, for Defoe claims to have made many more tours and visits about England than those of which we have record; but the major part must necessarily have been dexterous compilation. In 1725 appeared *A New Voyage round the World*, apparently entirely due to the author's own fertile imagination and extensive reading. It is full of his peculiar verisimilitude and has all the interest of Anson's or Dampier's voyages, with a charm of style superior even to that of the latter.

In 1726 Defoe published a curious and amusing little pamphlet entitled *Everybody's Business is Nobody's Business, or Private Abuses Public Grievances, exemplified in the Pride, Insolence, and Exorbitant Wages of our Women-Servants, Footmen, &c.* This subject was a favourite one with him, and in the pamphlet he showed the immaturity of his political views by advocating legislative interference in these matters. Towards the end of this same year *The Complete English Tradesman*, which may be supposed to sum up the experience of his business life, appeared, and its second volume followed two years afterwards. This book has been variously judged. It is generally and traditionally praised, but those who have read it will be more disposed to agree with Charles Lamb, who considers it "of a vile and debasing tendency," and thinks it "almost impossible to suppose the author in earnest." The intolerable meanness advocated for the sake of the paltriest gains, the entire ignoring of any pursuit in life except money-getting, and the representation of the whole duty of man as consisting first in the attainment of a competent fortune, and next, when that fortune has been attained, in spending not more than half of it, are certainly repulsive enough. But there are no reasons for thinking the performance ironical or insincere, and it cannot be doubted that Defoe would have been honestly unable even to understand Lamb's indignation. To 1726 also belongs *The Political History of the Devil*. This is a curious book, partly explanatory of Defoe's ideas on morality, and partly belonging to a series of demonological works which he wrote, and of which the chief others are *A System of Magic* (1726), and *An Essay on the History of Apparitions* (1728), issued the year before under another title. In all these works his treatment is on the whole rational and sensible; but in *The History of the Devil* he is somewhat hampered by an insufficiently worked-out theory as to the nature and personal existence of his hero, and the manner in which he handles the subject is an odd and not altogether satisfactory mixture of irony and earnestness. *A Plan of English Commerce*, containing very enlightened views on export trade, appeared in 1728.

During the years from 1715 to 1728 Defoe had issued pamphlets and minor works too numerous to mention. The only one of them perhaps which requires notice is *Religious Courtship* (1722), a curious series of dialogues displaying Defoe's unaffected religiosity, and at the same time the rather meddling intrusiveness with which he applied his religious notions. This was more flagrantly illustrated in one of his latest works, *The Treatise Concerning the Use and Abuse of the Marriage Bed* (1727), which was originally issued with a much more offensive name, and has been called "an excellent book with an improper title." The *Memoirs of Captain Carleton* (1728) were long attributed to Defoe, but the internal evidence is strongly against his authorship. They have been also attributed to Swift, with greater probability as far as style is concerned. *The Life of Mother Ross*, reprinted in Bohn's edition, has no claim whatever to be considered Defoe's.

There is little to be said of Defoe's private life during this period. He must in some way or other have obtained a considerable income. In 1724 he had built himself a large house at Stoke Newington, which had stables and grounds of considerable size. From the negotiations for the marriage of his daughter Sophia it appears that he had landed property in more than one place, and he had obtained on lease in 1722 a considerable estate from the corporation of Colchester, which was settled on his unmarried daughter at his

death. Other property was similarly allotted to his widow and remaining children, though some difficulty seems to have arisen from the misconduct of his son, to whom, for some purpose, the property was assigned during his father's lifetime, and who refused to pay what was due. There is a good deal of mystery about the end of Defoe's life; it used to be said that he died insolvent, and that he had been in jail shortly before his death. As a matter of fact, after great suffering from gout and stone, he died in Ropemaker's Alley, Moorfields, on Monday the 26th of April 1731, and was buried in Bunhill Fields. He left no will, all his property having been previously assigned, and letters of administration were taken out by a creditor. How his affairs fell into this condition, why he did not die in his own house, and why in the previous summer he had been in hiding, as we know he was from a letter still extant, are points not clearly explained. He was, however, attacked by Mist, whom he wounded, in prison in 1724. It is most likely that Mist had found out that Defoe was a government agent and quite probable that he communicated his knowledge to other editors, for Defoe's journalistic employment almost ceased about this time, and he began to write anonymously, or as "Andrew Moreton." It is possible that he had to go into hiding to avoid the danger of being accused as a real Jacobite, when those with whom he had contracted to assume the character were dead and could no longer justify his attitude.

Defoe married, on New Year's Day, 1684, Mary Tuffley, who survived until December 1732. They had seven children. His second son, Bernard or Benjamin Norton, has, like his father, a scandalous niche in the *Dunciad*. In April 1877 public attention was called to the distress of three maiden ladies, directly descended from Defoe, and bearing his name; and a crown pension of £75 a year was bestowed on each of them. His youngest daughter, Sophia, who married Henry Baker, left a considerable correspondence, now in the hands of her descendants. There are several portraits of Defoe, the principal one being engraved by Vandergucht.

In his lifetime, Defoe, as not belonging to either of the great parties at a time of the bitterest party strife, was subjected to obloquy on both sides. The great Whig writers leave him unnoticed. Swift and Gay speak slightingly of him,—the former, it is true, at a time when he was only known as a party pamphleteer. Pope, with less excuse, put him in the *Dunciad* towards the end of his life, but he confessed to Spence in private that Defoe had written many things and none bad. At a later period he was unjustly described as "a scurrilous party writer," which he certainly was not; but, on the other hand, Johnson spoke of his writing "so variously and so well," and put *Robinson Crusoe* among the only three books that readers wish longer. From Sir Walter Scott downwards the tendency to judge literary work on its own merits to a great extent restored Defoe to his proper place, or, to speak more correctly, set him there for the first time. Lord Macaulay's description of *Roxana*, *Moll Flanders* and *Colonel Jack* as "utterly nauseous and wretched" must be set aside as a freak of criticism.

Scott justly observed that Defoe's style "is the last which should be attempted by a writer of inferior genius; for though it be possible to disguise mediocrity by fine writing, it appears in all its naked inanity when it assumes the garb of simplicity." The methods by which Defoe attains his result are not difficult to disengage. They are the presentment of all his ideas and scenes in the plainest and most direct language, the frequent employment of colloquial forms of speech, the constant insertion of little material details and illustrations, often of a more or less digressive form, and, in his historico-fictitious works, as well as in his novels, the most rigid attention to vivacity and consistency of character. Plot he disregards, and he is fond of throwing his dialogues into regular dramatic form, with by-play prescribed and stage directions interspersed. A particular trick of his is also to divide his arguments after the manner of the preachers of his day into heads and subheads, with actual numerical signs affixed to them. These mannerisms undoubtedly help and emphasize the extraordinary faithfulness to nature of his fictions, but it would be a great mistake to suppose that they fully explain their charm. Defoe possessed genius, and his secret is at the last as impalpable as the secret of genius always is.

The character of Defoe, both mental and moral, is very clearly indicated in his works. He, the satirist of the true-born Englishman, was himself a model, with some notable variations and improvements, of the Englishman of his period. He saw a great many things, and what he did see he saw clearly. But there were also a great many things which he did not see, and there was often no logical connexion whatever between his vision and his blindness. The most curious example of this inconsistency, or rather of this indifference to general principle, occurs in his *Essay on Projects*. He there speaks very briefly and slightingly of life insurance, probably because it was then regarded as impious by religionists of his complexion. But on either side of this refusal are to be found elaborate projects of friendly societies and widows' funds, which practically cover, in a clumsy and roundabout manner, the whole ground of life insurance. In morals it is evident that he was, according to his lights, a strictly honest and honourable man. But sentiment of any "high-flying" description—to use the cant word of his time—was quite incomprehensible to him, or rather never presented itself as a thing to be comprehended. He tells us with honest and simple pride that when his patron Harley fell out, and Godolphin came in, he for three years held no communication with the former, and seems quite incapable of comprehending the delicacy which would have obliged him to follow Harley's fallen fortunes. His very anomalous position in regard to Mist is also indicative of a rather blunt moral perception. One of the most affecting things in his novels is the heroic constancy and fidelity of the maid Amy to her exemplary mistress Roxana. But Amy, scarcely by her own fault, is drawn into certain breaches of definite moral laws which Defoe did understand, and she is therefore condemned, with hardly a word of pity, to a miserable end. Nothing heroic or romantic was within Defoe's view; he could not understand passionate love, ideal loyalty, aesthetic admiration or anything of the kind; and it is probable that many of the little sordid touches which delight us by their apparent satire were, as designed, not satire at all, but merely a faithful representation of the feelings and ideas of the classes of which he himself was a unit.

His political and economical pamphlets are almost unmatched as clear presentations of the views of their writer. For driving the nail home no one but Swift excels him, and Swift perhaps only in *The Drapier's Letters*. There is often a great deal to be said against the view presented in those pamphlets, but Defoe sees nothing of it. He was perfectly fair but perfectly one-sided, being generally happily ignorant of everything which told against his own view.

The same characteristics are curiously illustrated in his moral works. The morality of these is almost

amusing in its downright positive character. With all the Puritan eagerness to push a clear, uncompromising, Scripture-based distinction of right and wrong into the affairs of every-day life, he has a thoroughly English horror of casuistry, and his clumsy canons consequently make wild work with the infinite intricacies of human nature. He is, in fact, an instance of the tendency, which has so often been remarked by other nations in the English, to drag in moral distinctions at every turn, and to confound everything which is novel to the experience, unpleasant to the taste, and incomprehensible to the understanding, under the general epithets of wrong, wicked and shocking. His works of this class therefore are now the least valuable, though not the least curious, of his books.

The earliest regular life and estimate of Defoe is that of Dr Towers in the *Biographia Britannica*. George Chalmers's *Life*, however (1786), added very considerable information. In 1830 Walter Wilson wrote the standard *Life* (3 vols.); it is coloured by political prejudice, but is a model of painstaking care, and by its abundant citations from works both of Defoe and of others, which are practically inaccessible to the general reader, is invaluable. In 1859 appeared a life of Defoe by William Chadwick, an extraordinary rhapsody in a style which is half Cobbett and half Carlyle, but amusing, and by no means devoid of acuteness. In 1864 the discovery of the six letters stirred up William Lee to a new investigation, and the results of this were published (London, 1869) in three large volumes. The first of these (well illustrated) contains a new life and particulars of the author's discoveries. The second and third contain fugitive writings assigned by Lee to Defoe for the first time. For most of these, however, we have no authority but Lee's own impressions of style, &c.; and consequently, though the best qualified judges will in most cases agree that Defoe may very likely have written them, it cannot positively be stated that he did. There is also a *Life* by Thomas Wright (1894). The *Earlier Life and Chief Earlier Works* of Defoe (1890) was included by Henry Morley in the "Carisbrooke Library." Charles Lamb's criticisms were made in three short pieces, two of which were written for Wilson's book, and the third for *The Reflector*. The volume on *Defoe* (1879) in the "English Men of Letters" series is by W. Minto.

There is considerable uncertainty about many of Defoe's writings; and even if all contested works be excluded, the number is still enormous. Besides the list in Bohn's *Lowndes*, which is somewhat of an *omnium gatherum*, three lists drawn with more or less care were compiled in the 19th century. Wilson's contains 210 distinct works, three or four only of which are marked as doubtful; Hazlitt's enumerates 183 "genuine" and 52 "attributed" pieces, with notes on most of them; Lee's extends to 254, of which 64 claim to be new additions. The reprint (3 vols.) edited for the "Pulteney Library" by Hazlitt in 1840-1843 contains a good and full life mainly derived from Wilson, the whole of the novels (including the *Serious Reflections* now hardly ever published with *Robinson Crusoe*), *Jure Divino*, *The Use and Abuse of Marriage*, and many of the more important tracts and smaller works. There is also an edition, often called Scott's, but really edited by Sir G. C. Lewis, in twenty volumes (London, 1840-1841). This contains the *Complete Tradesman*, *Religious Courtship*, *The Consolidator* and other works not comprised in Hazlitt's. Scott had previously in 1809 edited for Ballantyne some of the novels, in twelve volumes. Bohn's "British Classics" includes the novels (except the third part of *Robinson Crusoe*), *The History of the Devil*, *The Storm*, and a few political pamphlets, also the undoubtedly spurious *Mother Ross*. In 1870 Nimmo of Edinburgh published in one volume an admirable selection from Defoe. It contains Chalmers's *Life*, annotated and completed from Wilson and Lee, *Robinson Crusoe*, pts. i. and ii., *Colonel Jack*, *The Cavalier*, *Duncan Campbell*, *The Plague*, *Everybody's Business*, *Mrs Veal*, *The Shortest Way with Dissenters*, *Giving Alms no Charity*, *The True-Born Englishman*, *Hymn to the Pillory*, and very copious extracts from *The Complete English Tradesman*. An edition of Defoe's *Romances and Narratives* in sixteen volumes by G. A. Aitken came out in 1895.

If we turn to separate works, the bibliography of Defoe is practically confined (except as far as original editions are concerned) to *Robinson Crusoe*. *Mrs Veal* has been to some extent popularized by the work which it helped to sell; *Religious Courtship* and *The Family Instructor* had a vogue among the middle class until well into the 19th century, and *The History of the Union* was republished in 1786. But the reprints and editions of *Crusoe* have been innumerable; it has been often translated; and the eulogy pronounced on it by Rousseau gave it special currency in France, where imitations (or rather adaptations) have also been common.

In addition to the principal authorities already mentioned see John Forster, *Historical and Biographical Essays* (1858); G. Saintsbury, "Introduction" to Defoe's *Minor Novels*; and valuable notes by G. A. Aitken in *The Contemporary Review* (February 1890), and *The Athenaeum* (April 30, 1889; August 31, 1890). A facsimile reprint (1883) of *Robinson Crusoe* has an introduction by Mr Austin Dobson. Dr Karl T. Bülbring edited two unpublished works of Defoe, *The Compleat English Gentleman* (London, 1890) and *Of Royall Educacion* (London, 1905), from British Museum Add. MS. 32,555. Further light was thrown on Defoe's work as a political agent by the discovery (1906) of an unpublished paper of his in the British Museum by G. F. Warner. This was printed in the *English Historical Review*, and afterwards separately.

DEGAS, HILAIRE GERMAIN EDGARD (1834-), French painter, was born in Paris on the 19th of July 1834. Entering in 1855 the École des Beaux Arts, he early developed independence of artistic outlook, studying under Lamothe. He first exhibited in the Salon of 1865, contributing a "War in the middle ages," a work executed in pastel. To this medium he was ever faithful, using it for some of his best work. In 1866 his "Steeplechase" revealed him as a painter of the racecourse and of all the most modern aspects of life and of Parisian society, treated in an extremely original manner. He subsequently exhibited in 1867 "Family Portraits," and in 1868 a portrait of a dancer in the "Ballet of *La Source*." In 1869 and 1870 he restricted himself to portraits; but thenceforward he abandoned the Salons and attached himself to the Impressionists. With Manet and Monet he took the lead of the new school at its first exhibition in 1874, and repeatedly contributed to these exhibitions (in 1876, 1878, 1879 and 1880). In 1868 he had shown his first study of a dancer, and in numerous pastels he proclaimed himself the painter of the ballet, representing its figurantes in every attitude with more constant aim at truth than grace. Several of his works may be seen at the Luxembourg Gallery, to which they were bequeathed, among a collection of impressionist pictures, by M.

Caillebotte. In 1880 Degas showed his powers of observation in a set of “Portraits of Criminals,” and he attempted modelling in a “Dancer,” in wax. He afterwards returned to his studies of the sporting world, exhibiting in December 1884 at the Petit Gallery two views of “Races” which had a great success, proving the increasing vogue of the artist among collectors. He is ranked with Manet as the leader of the “impressionist school.” At the eighth Impressionist Exhibition, in 1886, Degas continued his realistic studies of modern life, showing drawings of the nude, of workwomen, and of jockeys. Besides his pastels and his paintings of genre and portraits—among these, several likenesses of Manet—Degas also handled his favourite subjects in etching and in aquatint; and executed several lithographs of “Singers at Cafés-concert,” of “Ballet-girls,” and indeed of every possible subject of night-life and incidents behind the scenes. His work is to be seen not only at the Luxembourg but in many of the great private collections in Paris, in England and America. In the Centenary Exhibition of 1900 he exhibited “The Interior of a Cotton-Broker’s Office at New Orleans” (belonging to the Museum at Pau) and “The Rehearsal.”

See also G. Moore, “Degas, the Painter of Modern Life,” *Magazine of Art* (1890); J. K. Huysmans, *Certains* (Paris, 1889); G. Geffroy, *La Vie Artistique* (3^{e} Série, Paris, 1894).

DE GEER, LOUIS GERHARD, Baron (1818-1896), Swedish statesman and writer, was born on the 18th of July 1818 at Finspång castle. He adopted the legal profession, and in 1855 became president of the Göta Hofret, or lord justice of one of the Swedish supreme courts. From the 7th of April 1858 to the 3rd of June 1870 he was minister of justice. As a member of the Upper House he took part in all the Swedish *Riksdags* from 1851 onwards, though he seldom spoke. From 1867 to 1878 he was the member for Stockholm in the first chamber, and introduced and passed many useful reformatory statutes; but his greatest achievement, as a statesman, was the reform of the Swedish representative system, whereby he substituted a bi-cameral elective parliament, on modern lines, for the existing cumbersome representation by estates, a survival from the later middle ages. This great measure was accepted by the Riksdag in December 1865, and received the royal sanction on the 22nd of June 1866. For some time after this De Geer was the most popular man in Sweden. He retired from the ministry in 1870, but took office again, as minister of justice, in 1875. In 1876 he became minister of state, which position he retained till April 1880, when the failure of his repeated efforts to settle the armaments’ question again induced him to resign. From 1881 to 1888 he was chancellor of the universities of Upsala and Lund. Besides several novels and aesthetic essays, De Geer has written a few political memoirs of supreme merit both as to style and matter, the most notable of which are: *Minnesteckning öfver A. J. v. Höpken* (Stockholm, 1881); *Minnesteckning öfver Hans Järta* (Stockholm, 1874); *Minnesteckning öfver B. B. von Platen* (Stockholm, 1886); and his own *Minnen* (Stockholm, 1892), an autobiography, invaluable as a historical document, in which the political experience and the matured judgments of a lifetime are recorded with singular clearness, sobriety and charm.

See *Sveriges historia* (Stockholm, 1881, &c.), vi,; Carl Gustaf Malmström, *Historiska Studier* (Stockholm, 1897).

(R. N. B.)

DEGGENDORF, or Deckendorf, a town of Germany, in the kingdom of Bavaria, 25 m. N.W. of Passau, on the left bank of the Danube, which is there crossed by two iron bridges. Pop. (1905) 7154. It is situated at the lower end of the beautiful valley of the Perlbach, and in itself it is a well-built and attractive town. It possesses an old town hall dating from 1566, a hospital, a lunatic asylum, an orphanage, and a large parish church rebuilt in 1756; but the chief interest centres in the church of the Holy Sepulchre, built in 1337, which attracts thousands of pilgrims to its *Porta Caeli* or *Gnadenpforte* (Gate of Mercy) opened annually on Michaelmas eve and closed again on the 4th of October. In 1837, on the celebration of the 500th anniversary of this solemnity, the number of pilgrims was reckoned at nearly 100,000. Such importance as the town possesses is now rather commercial than religious,—it being a depôt for the timber trade of the Bavarian forest, a station for the Danube steamboat company, and the seat of several mills, breweries, potteries and other industrial establishments. On the bank of the Danube outside the town are the remains of the castle of Findelstein; and on the Geiersberg (1243 ft.), in the immediate vicinity, stands another old pilgrimage church. About 6 m. to the north is the village of Metten, with a Benedictine monastery founded by Charlemagne in 801, restored as an abbey in 1840 by Louis I. of Bavaria, and well known as an educational institution. The first mention of Deggendorf occurs in 868, and it appears as a town in 1212. Henry (d. 1290) of the Landshut branch of the ruling family of Bavaria made it the seat of a custom-house; and in 1331 it became the residence of Henry III. of Natternberg (d. 1333), so called from a castle in the neighbourhood. In 1337 a wholesale massacre of the Jews, who were accused of having thrown the sacred host of the church of the Holy Sepulchre into a well, took place in the town; and it is probably from about this date that the pilgrimage above mentioned came into vogue. The town was captured by the Swedish forces in 1633, and in the war of the Austrian Succession it was more than once laid in ashes.

See Grüber and Müller, *Der bayerische Wald* (Regensburg, 1851); Mittermüller, *Die heil. Hostien und die Jüden in Deggendorf* (Landshut, 1866); and *Das Kloster Metten* (Straubing, 1857).

DE HAAS, MAURITZ FREDERICK HENDRICK (1832-1895), American marine painter, was born on the 12th of December 1832 in Rotterdam, Holland. He studied art in the Rotterdam Academy and at The Hague, under Bosboom and Louis Meyer, and in 1851-1852 in London, following the English water-colourists of the day. In 1857 he received an artist's commission in the Dutch navy, but in 1859, under the patronage of August Belmont, who had recently been minister of the United States at The Hague, he resigned and removed to New York city. He became an associate of the National Academy in 1863 and an academician in 1867, and exhibited annually in the academy, and in 1866 he was one of the founders of the American Society of Painters in Water Colors. He died on the 23rd of November 1895. His "Farragut Passing the Forts at the Battle of New Orleans" and "The Rapids above Niagara," which were exhibited at the Paris Exposition of 1878, were his best known but not his most typical works, for his favourite subjects were storm and wreck, wind and heavy surf, and less often moonlight on the coasts of Holland, of Jersey, of New England, and of Long Island, and on the English Channel.

His brother, William Frederick de Haas (1830-1880), who emigrated to New York in 1854, was also a marine painter.

DEHRA, a town of British India, headquarters of the Dehra Dun district in the United Provinces. Pop. (1901) 28,095. It lies at an elevation of 2300 ft. Here the Hardwar-Dehra railway terminates. Dehra is the headquarters of the Trigonometrical Survey and of the Forest Department, besides being a cantonment for a Gurkha force. The Forest School, which trains subordinate forest officials for all parts of India, is a fine building. Attached to it is an institution for the scientific study of sylvi-culture and the exploitation and administration of forests. The town of Dehra grew up round the temple built in 1699 by the heretical Sikh Guru, Ram Rai, the founder of the Udasi sect of Ascetics. This temple is a remarkable building in Mahommedan style. The central block, in imitation of the emperor Jahangir's tomb, contains the bed on which the Guru, after dying at will and coming back to life several times, ultimately died outright; it is an object of great veneration. At the corners of the central block are smaller monuments commemorating the Guru's wives.

DEHRA DUN, a district of British India, in the Meerut division of the United Provinces. Its area is 1209 sq. m. The district is bounded on the N. by the native state of Tehri or Garhwal, on the E. by British Garhwal, on the S. by the Siwálik hills, which separate it from Saharanpur district, and on the W. by the hill states of Sirmur, Jubbal and Taroch. The valley (the Dun) has an area of about 673 sq. m., and forms a parallelogram 45 m. from N.W. to S.E. and 15 m. broad. It is well wooded, undulating and intersected by streams. On the N.E. the horizon is bounded by the Mussoorie or lower range of the Himalayas, and on the S. by the Siwálik hills. The Himalayas in the north of the district attain a height between 7000 and 8000 ft., one peak reaching an elevation of 8565 ft.; the highest point of the Siwálik range is 3041 ft. above sea-level. The principal passes through the Siwálik hills are the Timli pass, leading to the military station of Chakráta, and the Mohand pass leading to the sanatoriums of Mussoorie and Landaur. The Ganges bounds the Dehra valley on the E.; the Jumna bounds it on the W. From a point about midway between the two rivers, and near the town of Dehra, runs a ridge which forms the watershed of the valley. To the west of this ridge the water collects to form the Asan, a tributary of the Jumna; whilst to the east the Suswa receives the drainage and flows into the Ganges. To the east the valley is characterized by swamps and forests, but to the west the natural depressions freely carry off the surface drainage. Along the central ridge, the water-level lies at a great depth from the surface (228 ft.), but it rises gradually as the country declines towards the great rivers. In 1901 the population was 178,195, showing an increase of 6% in the decade. A railway to Dehra from Hardwar, on the Oudh and Rohilkhand line (32 m.), was completed in 1900. The district is served by the Dun canals. Tea gardens cover a considerable area, and the valley contains a colony of European tea planters.

History.—Dehra Dun only emerges from the mists of legend into authentic history in the 17th century A.D., when it formed part of the Garhwal kingdom. Towards the end of the century the heretical Sikh Guru, Ram Rai, expelled from the Punjab, sought refuge in the Dun and gathered round him a crowd of devotees. Fateh Sah, raja of Garhwal, endowed the temple which he built, round which grew up the town of Gurudwara or Dehra (*q.v.*). In the 18th century the fertility of the valley attracted the attention of Najib-ud-daula, governor of Saharanpur, who invaded it with an army of Rohillas in 1757 and annexed it to his dominion. His rule, which lasted till 1770, brought great prosperity to the Dun; but on his death it became a prey to the surrounding tribes, its desolation being completed after its conquest by the Gurkhas in 1803. In 1814 it was taken possession of by the British, and in the following year was annexed to Saharanpur. Under British administration the Dun rapidly recovered its prosperity.

DEIOCES (Δηιόκης), according to Herodotus (i. 96 ff.) the first king of the Medes. He narrates that, when the Medes had rebelled against the Assyrians and gained their independence about 710 B.C., according to his chronology (cf. Diodor. ii. 32), they lived in villages without any political organization, and therefore the

whole country was in a state of anarchy. Then Deioces, son of Phraortes, an illustrious man of upright character, was chosen judge in his village, and the justness of his decisions induced the inhabitants of the other villages to throng to him. At last the Medes resolved to make an end of the intolerable state of their country by erecting a kingdom, and chose Deioces king. He now caused them to build a great capital, Ecbatana, with a royal palace, and introduced the ceremonial of oriental courts; he surrounded himself with a guard and no longer showed himself to the people, but gave his judgments in writing and controlled the people by officials and spies. He united all the Median tribes, and ruled fifty-three years (*c.* 699-647 B.C.), though perhaps, as G. Rawlinson supposed, the fifty-three years of his reign are exchanged by mistake with the twenty-two years of his son Phraortes, under whom the Median conquests began.

The narration of Herodotus is only a popular tradition which derives the origin of kingship from its judicial functions, considered as its principal and most beneficent aspect. We know from the Assyrian inscriptions that just at the time which Herodotus assigns to Deioces the Medes were divided into numerous small principalities and subjected to the great Assyrian conquerors. Among these petty chieftains, Sargon in 715 mentions Dāyukku, "lieutenant of Man" (he probably was, therefore, a vassal of the neighbouring king of Man in the mountains of south-eastern Armenia), who joined the Urartians and other enemies of Assyria, but was by Sargon transported to Hamath in Syria "with his clan." His district is called "bit-Dāyaukki," "house of Deioces," also in 713, when Sargon invaded these regions again. So it seems that the dynasty, which more than half a century later succeeded in throwing off the Assyrian yoke and founded the Median empire, was derived from this Dāyukku, and that his name was thus introduced into the Median traditions, which contrary to history considered him as founder of the kingdom.

(Ed. M.)

DEÏOTARUS, a tetrarch of Galatia (Gallo-Graecia) in Asia Minor, and a faithful ally of the Romans. He is first heard of at the beginning of the third Mithradatic war, when he drove out the troops of Mithradates under Eumachus from Phrygia. His most influential friend was Pompey, who, when settling the affairs of Asia (63 or 62 B.C.), rewarded him with the title of king and an increase of territory (Lesser Armenia). On the outbreak of the civil war, Deïotarus naturally sided with his old patron Pompey, and after the battle of Pharsalus escaped with him to Asia. In the meantime Pharnaces, the son of Mithradates, had seized Lesser Armenia, and defeated Deïotarus near Nicopolis. Fortunately for Deïotarus, Caesar at that time (47) arrived in Asia from Egypt, and was met by the tetrarch in the dress of a suppliant. Caesar pardoned him for having sided with Pompey, ordered him to resume his royal attire, and hastened against Pharnaces, whom he defeated at Zela. In consequence of the complaints of certain Galatian princes, Deïotarus was deprived of part of his dominions, but allowed to retain the title of king. On the death of Mithradates of Pergamum, tetrarch of the Trocmi, Deïotarus was a candidate for the vacancy. Other tetrarchs also pressed their claims; and, further, Deïotarus was accused by his grandson Castor of having attempted to assassinate Caesar when the latter was his guest in Galatia. Cicero, who entertained a high opinion of Deïotarus, whose acquaintance he had made when governor of Cilicia, undertook his defence, the case being heard in Caesar's own house at Rome. The matter was allowed to drop for a time, and the assassination of Caesar prevented any final decision being pronounced. In his speech Cicero briefly dismisses the charge of assassination, the main question being the distribution of the provinces, which was the real cause of the quarrels between Deïotarus and his relatives. After Caesar's death, Mark Antony, for a large monetary consideration, publicly announced that, in accordance with instructions left by Caesar, Deïotarus was to resume possession of all the territory of which he had been deprived. When civil war again broke out, Deïotarus was persuaded to support Brutus and Cassius, but after the battle of Philippi went over to the triumvirs. He remained in possession of his kingdom till his death at a very advanced age.

See Cicero, *Philippica*, ii. 37; *Ad fam.* viii. 10, ix. 12, xv. 1, 2, 4; *Ad Att.* xiv. 1; *De divin.* i. 15, ii. 36, 37; *De harusp. resp.* 13, and above all *Pro rege Deiotaro*; Appian, *Bell. Mithrid.* 75, 114; *Bellum Alexandrinum*, 34-41, 65-77; Dio Cassius xli. 63, xlii. 45, xlvii. 24, 48, xlviii. 33.

DEIR, or Deir Ez-Zor, a town of Asiatic Turkey, on the right bank of the Euphrates, 27½ m. above its junction with the Khabor, lat. 35° 20′ N., long. 40° 12′ E. Pop. 8000 and upward, about one-tenth Christians; except in the official classes, there are no Turks. It is the capital and the only considerable town of the Zor sanjak, formed in 1857, which includes Ras el-'Ain on the north and Palmyra on the south, with a total area of 32,820 sq. m., chiefly desert, and an estimated population of 100,000, mostly Arab nomads. Deir itself is a thrifty and rising town, having considerable traffic; it is singularly European in appearance, with macadamized streets and a public garden. The name Deir means monastery, but there is no other trace or tradition of the occupation of the site before the 14th century, and until it became the capital of the sanjak it was an insignificant village. It is an important centre for the control of the Bedouin Arabs, and has a garrison of about 1000 troops, including a special corps of mule-riders. It is also a road centre, the roads from the Mediterranean to Bagdad by way of Aleppo and Damascus respectively meeting here. A road also leads northward, by Sinjar, to Mosul, crossing the river on a stone bridge, built in 1897, the only permanent bridge over the Euphrates south of Asia Minor.

(J. P. Pe.)

DEIRA, the southern of the two English kingdoms afterwards united as Northumbria. According to Simeon of Durham it extended from the Humber to the Tyne, but the land was waste north of the Tees. York was the capital of its kings. The date of its first settlement is quite unknown, but the first king of whom we have any record is Ella or Ælle, the father of Edwin, who is said to have been reigning about 585. After his death Deira was subject to Æthelfrith, king of Northumbria, until the accession of Edwin, in 616 or 617, who ruled both kingdoms (see Edwin) till 633. Osric the nephew of Edwin ruled Deira (633-634), but his son Oswine was put to death by Oswio in 651. For a few years subsequently Deira was governed by Æthelwald son of Oswald.

See Bede, *Historia ecclesiastica*, ii. 14, iii. 1, 6, 14 (ed. C. Plummer, Oxford, 1896); Nennius, *Historia Brittonum*, § 64 (ed. Th. Mommsen, Berlin, 1898); Simeon of Durham, *Opera*, i. 339 (ed. T. Arnold, London, 1882-1885).

(F. G. M. B.)

DEISM (Lat. *deus*, god), strictly the belief in one supreme God. It is however the received name for a current of rationalistic theological thought which, though not confined to one country, or to any well-defined period, was most conspicuous in England in the last years of the 17th and the first half of the 18th century. The deists, differing widely in important matters of belief, were yet agreed in seeking above all to establish the certainty and sufficiency of natural religion in opposition to the positive religions, and in tacitly or expressly denying the unique significance of the supernatural revelation in the Old and New Testaments. They either ignored the Scriptures, endeavoured to prove them in the main by a helpful republication of the *Evangelium aeternum*, or directly impugned their divine character, their infallibility, and the validity of their evidences as a complete manifestation of the will of God. The term "deism" not only is used to signify the main body of the deists' teaching, or the tendency they represent, but has come into use as a technical term for one specific metaphysical doctrine as to the relation of God to the universe, assumed to have been characteristic of the deists, and to have distinguished them from atheists, pantheists and theists,—the belief, namely, that the first cause of the universe is a personal God, who is, however, not only distinct from the world but apart from it and its concerns.

The words "deism" and "deist" appear first about the middle of the 16th century in France (cf. Bayle's *Dictionnaire, s.v.* "Viret," note D), though the deistic standpoint had already been foreshadowed to some extent by Averroists, by Italian authors like Boccaccio and Petrarch, in More's *Utopia* (1515), and by French writers like Montaigne, Charron and Bodin. The first specific attack on deism in English was Bishop Stillingfleet's *Letter to a Deist* (1677). By the majority of those historically known as the English deists, from Blount onwards, the name was owned and honoured. They were also occasionally called "rationalists." "Free-thinker" (in Germany, *Freidenker*) was generally taken to be synonymous with "deist," though obviously 934
capable of a wider signification, and as coincident with *esprit fort* and with *libertin* in the original and theological sense of the word.[1] "Naturalists" was a name frequently used of such as recognized no god but nature, of so-called Spinozists, atheists; but both in England and Germany, in the 18th century, this word was more commonly and aptly in use for those who founded their religion on the *lumen naturae* alone. It was evidently in common use in the latter half of the 16th century as it is used by De Mornay in *De la vérité de la religion chrétienne* (1581) and by Montaigne. The same men were not seldom assaulted under the name of "theists"; the later distinction between "theist" and "deist," which stamped the latter word as excluding the belief in providence or in the immanence of God, was apparently formulated in the end of the 18th century by those rationalists who were aggrieved at being identified with the naturalists. (See also Theism.)

The chief names amongst the deists are those of Lord Herbert of Cherbury (1583-1648), Charles Blount (1654-1693), Matthew Tindal (1657-1733), William Wollaston (1659-1724), Thomas Woolston (1669-1733), Junius Janus (commonly known as John) Toland (1670-1722), the 3rd earl of Shaftesbury (1671-1713), Viscount Bolingbroke (1678-1751), Anthony Collins (1676-1729), Thomas Morgan (?-1743), and Thomas Chubb (1679-1747).[2] Peter Annet (1693-1769), and Henry Dodwell (the younger; d. 1784), who made his contribution to the controversy in 1742, are of less importance. Of the eleven first named, ten appear to have been born within twenty-five years of one another; and it is noteworthy that by far the greater part of the literary activity of the deists, as well as of their voluminous opponents, falls within the same half century.

The impulses that promoted a vein of thought cognate to deism were active both before and after the time of its greatest notoriety. But there are many reasons to show why, in the 17th century, men should have set themselves with a new zeal, in politics, law and theology, to follow the light of nature alone, and to cast aside the fetters of tradition and prescriptive right, of positive codes, and scholastic systems, and why in England especially there should, amongst numerous free-thinkers, have been not a few free writers. The significance of the Copernican system, as the total overthrow of the traditional conception of the universe, dawned on all educated men. In physics, Descartes had prepared the way for the final triumph of the mechanical explanation of the world in Newton's system. In England the new philosophy had broken with time-honoured beliefs more completely than it had done even in France; Hobbes was more startling than Bacon. Locke's philosophy, as well as his theology, served as a school for the deists. Men had become weary of Protestant scholasticism; religious wars had made peaceful thinkers seek to take the edge off dogmatical rancour; and the multiplicity of religious sects, coupled with the complete failure of various attempts at any substantial reconciliation, provoked distrust of the common basis on which all were founded. There was a school of distinctively latitudinarian thought in the Church of England; others not unnaturally thought it better to extend the realm of the *adiaphora* beyond the sphere of Protestant ritual or the details of systematic divinity. Arminianism had revived the rational side of theological method. Semi-Arians and Unitarians, though sufficiently distinguished from the free-thinkers by reverence for the letter of Scripture, might be held to encourage departure from the ancient landmarks. The scholarly labours of P. D. Huet, R. Simon, L. E. Dupin, and Jean Le Clerc (Clericus), of the orientalists John Lightfoot, John Spencer and Humphrey Prideaux, of John

Mill, the collator of New Testament readings, and John Fell, furnished new materials for controversy; and the scope of Spinoza's *Tractatus theologico-politicus* had naturally been much more fully apprehended than ever his *Ethica* could be. The success of the English revolution permitted men to turn from the active side of political and theological controversy to speculation and theory; and curiosity was more powerful than faith. Much new ferment was working. The toleration and the free press of England gave it scope. Deism was one of the results, and is an important link in the chain of thought from the Reformation to our own day.

Long before England was ripe to welcome deistic thought Lord Herbert of Cherbury earned the name "Father of Deism" by laying down the main line of that religious philosophy which in various forms continued ever after to be the backbone of deistic systems. He based his theology on a comprehensive, if insufficient, survey of the nature, foundation, limits and tests of human knowledge. And amongst the divinely implanted, original, indefeasible *notitiae communes* of the human mind, he found as foremost his five articles:—that there is one supreme God, that he is to be worshipped, that worship consists chiefly of virtue and piety, that we must repent of our sins and cease from them, and that there are rewards and punishments here and hereafter. Thus Herbert sought to do for the religion of nature what his friend Grotius was doing for natural law,—making a new application of the standard of Vincent of Lerins, *Quod semper, quod ubique, quod ab omnibus*. It is important to notice that Herbert, as English ambassador at Paris, united in himself the currents of French and English thought, and also that his De Veritate, published in Latin and translated into French, did not appear in an English version.

Herbert had hardly attempted a systematic criticism of the Christian revelation either as a whole or in its details. Blount, a man of a very different spirit, did both, and in so doing may be regarded as having inaugurated the second main line of deistic procedure, that of historico-critical examination of the Old and New Testaments. Blount adopted and expanded Hobbes's arguments against the Mosaic authorship of the Pentateuch; and, mainly in the words of Burnet's *Archeologiae philosophicae*, he asserts the total inconsistency of the Mosaic Hexaemeron with the Copernican theory of the heavens, dwelling with emphasis on the impossibility of admitting the view developed in Genesis, that the earth is the most important part of the universe. He assumes that the narrative was meant *ethically*, not *physically*, in order to eliminate false and polytheistic notions; and he draws attention to that double narrative in Genesis which was elsewhere to be so fruitfully handled. The examination of the miracles of Apollonius of Tyana, professedly founded on papers of Lord Herbert's, is meant to suggest similar considerations with regard to the miracles of Christ. Naturalistic explanations of some of these are proposed, and a mythical theory is distinctly foreshadowed when Blount dwells on the inevitable tendency of men, especially long after the event, to discover miracles attendant on the birth and death of their heroes. Blount assaults the doctrine of a mediator as irreligious. He dwells much more pronouncedly than Herbert on the view, afterwards regarded as a special characteristic of all deists, that much or most error in religion has been invented or knowingly maintained by sagacious men for the easier maintenance of good government, or in the interests of themselves and their class. And when he heaps suspicion, not on Christian dogmas, but on beliefs of which the resemblance to Christian tenets is sufficiently patent, the real aim is so transparent that his method seems to partake rather of the nature of literary eccentricity than of polemical artifice; yet by this disingenuous indirectness he gave his argument that savour of duplicity which ever after clung to the popular conception of deism.

Shaftesbury, dealing with matters for the most part different from those usually handled by the deists, stands almost wholly out of their ranks. But he showed how loosely he held the views he did not go out of his way to attack, and made it plain how little weight the letter of Scripture had for himself; and, writing with much greater power than any of the deists, he was held to have done more than any one of them to forward the cause for which they wrought. Founding ethics on the native and cultivable capacity in men to appreciate worth in men and actions, and, like the ancient Greek thinkers whom he followed, associating the apprehension of morality with the apprehension of beauty, he makes morality wholly independent of scriptural enactment, and still more, of theological forecasting of future bliss or agony. He yet insisted on religion as the crown of virtue; and, arguing that religion is inseparable from a high and holy enthusiasm for the divine plan of the universe, he sought the root of religion in feeling, not in accurate beliefs or meritorious good works. He set little store on the theology of those who in a system of dry and barren notions "pay handsome compliments to the Deity," "remove providence," "explode devotion," and leave but "little of zeal, affection, or warmth in what they call rational religion." In the protest against the scheme of "judging truth by counting noses," Shaftesbury recognized the danger of the standard which seemed to satisfy many deists; and in almost every respect he has more in common with those who afterwards, in Germany, annihilated the pretensions of complacent rationalism than with the rationalists themselves.

Toland, writing at first professedly without hostility to any of the received elements of the Christian faith, insisted that Christianity was not mysterious, and that the value of religion could not lie in any unintelligible or self-contradictory elements; though we cannot know the real essence of God or of any of his creatures, yet our beliefs about God must be thoroughly consistent with reason. Afterwards, Toland discussed, with considerable real learning and much show of candour, the comparative evidence for the canonical and apocryphal Scriptures, and demanded a careful and complete historical examination of the grounds on which our acceptance of the New Testament canon rests. He contributed little to the solution of the problem, but forced the investigation of the canon alike on theologians and the reading public. Again, he sketched a view of early church history, further worked out by Johann Salomo Semler (1725-1791), and surprisingly like that which was later elaborated by the Tübingen school. He tried to show, both from Scripture and extra-canonical literature, that the primitive church, so far from being an incorporate body of believers with the same creed and customs, really consisted of two schools, each possessing its "own gospel"—a school of Ebionites or Judaizing Christians, and the more liberal school of Paul. These parties, consciously but amicably differing in their whole relation to the Jewish law and the outside world, were subsequently forced into a non-natural uniformity. The cogency of Toland's arguments was weakened by his manifest love of paradox. Wollaston upheld the "intellectual" theory of morality, and all his reasoning is independent of any authority or evidence derived from revelation. His system was simplicity itself, all sin being reduced to the one form of lying. He favoured the idea of a future life as being necessary to set right the mistakes and inequalities of the present.

Collins, who had created much excitement by his *Discourse of Free-thinking*, insisting on the value and necessity of unprejudiced inquiry, published at a later stage of the deistic controversy the famous argument on the evidences of Christianity. Christianity is founded on Judaism; its main prop is the argument from the fulfilment of prophecy. Yet no interpretation or rearrangement of the text of Old Testament prophecies will secure a fair and non-allegorical correspondence between these and their alleged fulfilment in the New Testament. The inference is not expressly drawn, though it becomes perfectly clear from his refutation of William Whiston's curious counter theory that there were in the original Hebrew scriptures prophecies which were literally fulfilled in the New Testament, but had been expunged at an early date by Jewish scribes. Collins indicates the possible extent to which the Jews may have been indebted to Chaldeans and Egyptians for their theological views, especially as great part of the Old Testament would appear to have been remodelled by Ezra; and, after dwelling on the points in which the prophecies attributed to Daniel differ from all other Old Testament predictions, he states the greater number of the arguments still used to show that the book of Daniel deals with events past and contemporaneous, and is from the pen of a writer of the Maccabean period, a view now generally accepted. Collins resembles Blount in "attacking specific Christian positions rather than seeking for a foundation on which to build the edifice of Natural Religion." Amongst those who replied to him were Richard Bentley, Edward Chandler, bishop of Lichfield, and Thomas Sherlock, afterwards bishop of London, who also attacked Woolston. They refuted him easily on many specific points, but carefully abstained from discussing the real question at issue, namely the propriety of free inquiry.

Woolston, at first to all appearance working earnestly in behalf of an allegorical but believing interpretation of the New Testament miracles, ended by assaulting, with a yet unknown violence of speech, the absurdity of accepting them as actual historical events, and did his best to overthrow the credibility of Christ's principal miracles. The bitterness of his outspoken invective against the clergy, against all priestcraft and priesthood, was a new feature in deistic literature, and injured the author more than it furthered his cause.

Tindal's aim seems to have been a sober statement of the whole case in favour of natural religion, with copious but moderately worded criticism of such beliefs and usages in the Christian and other religions as he conceived to be either non-religious or directly immoral and unwholesome. The work in which he endeavoured to prove that true Christianity is as old as the creation, and is really but the republication of the gospel of nature, soon gained the name of the "Deist's Bible." It was against Tindal that the most important of the orthodox replies were directed, *e.g.* John Conybeare's *Defence of Revealed Religion*, William Law's *Case of Reason* and, to a large extent, Butler's *Analogy*.

Morgan criticized with great freedom the moral character of the persons and events of Old Testament history, developing the theory of conscious "accommodation" on the part of the leaders of the Jewish church. This accommodation of truth, by altering the form and substance of it to meet the views and secure the favour of ignorant and bigoted contemporaries, Morgan attributes also to the apostles and to Jesus. He likewise expands at great length a theory of the origin of the Catholic Church much like that sketched by Toland, but assumes that Paul and his party, latterly at least, were distinctly hostile to the Judaical party of their fellow-believers in Jesus as the Messias, while the college of the original twelve apostles and their adherents viewed Paul and his followers with suspicion and disfavour. Persecution from without Morgan regards as the influence which mainly forced the antagonistic parties into the oneness of the catholic and orthodox church. Morgan "seems to have discerned the dawning of a truer and better method" than the others. "He saw dimly that things require to be accounted for as well as affirmed or denied," and he was "one of the pioneers of modern historical science as applied to biblical criticism."

Annet made it his special work to invalidate belief in the resurrection of Christ, and to discredit the work of Paul.

Chubb, the least learnedly educated of the deists, did more than any of them, save Herbert, to round his system into a logical whole. From the New Testament he sought to show that the teaching of Christ substantially coincides with natural religion as he understood it. But his main contention is that Christianity is not a doctrine but a life, not the reception of a system of truths or facts, but a pious effort to live in accordance with God's will here, in the hope of joining him hereafter. Chubb dwells with special emphasis on the fact that Christ preached the gospel to the poor, and argues, as Tindal had done, that the gospel must therefore be accessible to all men without any need for learned study of evidences for miracles, and intelligible to the meanest capacity. He sought to show that even in the New Testament there are essential contradictions, and instances the unconditional forgiveness preached by Christ in the gospels as compared with Paul's doctrine of forgiveness by the mediation of Christ. Externally Chubb is interesting as representing the deism of the people contrasted with that of Tindal the theologian.

Dodwell's ingenious thesis, that Christianity is not founded on argument, was certainly not meant as an aid to faith; and, though its starting-point is different from all other deistical works, it may safely be reckoned amongst their number.

Though himself contemporary with the earlier deists, Bolingbroke's principal works were posthumously published after interest in the controversy had declined. His whole strain, in sharp contrast to that of most of his predecessors, is cynical and satirical, and suggests that most of the matters discussed were of small personal concern to himself. He gives fullest scope to the ungenerous view that a vast proportion of professedly revealed truth was ingeniously palmed off by the more cunning on the more ignorant for the convenience of keeping the latter under. But he writes with keenness and wit, and knows well how to use the materials already often taken advantage of by earlier deists.

Before passing on to a summary of the deistic position, it is necessary to say something of the views of Conyers Middleton (*q.v.*), who, though he never actually severed himself from orthodoxy, yet advanced theories closely analogous to those of the deists. His most important theological work was that devoted to an exposure of patristic miracles. His attack was based largely on arguments which could be turned with equal force against the miracles of the New Testament, and he even went further than previous rationalists in impugning the credibility of statements as to alleged miracles emanating from martyrs and the fathers of the early church. That Middleton was prepared to carry this type of argument into the apostolic period is shown

by certain posthumous essays (*Miscellaneous Works*; ii. pp. 255 ff.), in which he charges the New Testament writers with inconsistency and the apostles with suppressing their cherished beliefs on occasions of difficulty.

In the substance of what they received as natural religion, the deists were for the most part agreed; Herbert's articles continued to contain the fundamentals of their theology. Religion, though not identified with morality, had its most important outcome in a faithful following of the eternal laws of morality, regarded as the will of God. With the virtuous life was further to be conjoined a humble disposition to adore the Creator, avoiding all factitious forms of worship as worse than useless. The small value they attributed to all outward and special forms of service, and the want of any sympathetic craving for the communion of saints, saved the deists from attempting to found a free-thinking church. They seem generally to have inclined to a quietistic accommodation to established forms of faith, till better times came. They steadfastly sought to eliminate the miraculous from theological belief, and to expel from the system of religious truth all debatable, difficult or mysterious articles. They aimed at a rational and intelligible faith, professedly in order to make religion, in all its width and depth, the heritage of every man. They regarded with as much suspicion the notion of a "peculiar people" of God, as of a unique revelation, and insisted on the possibility of salvation for the heathen. They rejected the doctrine of the Trinity, and protested against mediatorship, atonement and the imputed righteousness of Christ, always laying more stress on the teaching of Christ than on the teaching of the church about him; but they repeatedly laid claim to the name of Christians or of Christian deists. Against superstition, fanaticism and priestcraft they protested unceasingly. They all recognized the soul of man—not regarded as intellectual alone—as the ultimate court of appeal. But they varied much in their attitude towards the Bible. Some were content to argue their own ideas into Scripture, and those they disliked out of it; to one or two it seemed a satisfaction to discover difficulties in Scripture, to point to historical inaccuracies and moral defects. Probably Chubb's position on this head is most fairly characteristic of deism. He holds that the narrative, especially of the New Testament, is in the main accurate, but, as written after the events narrated, has left room for misunderstandings and mistakes. The apostles were good men, to whom, after Christ, we are most indebted; but they were fairly entitled to their own private opinions, and naturally introduced these into their writings. The epistles, according to Chubb, contain errors of fact, false interpretations of the Old Testament, and sometimes disfigurement of religious truth.

The general tendency of the deistical writings is sufficiently self-consistent to justify a common name. But deism is not a compact system nor is it the outcome of any one line of philosophical thought. Of matters generally regarded as pertaining to natural religion, that on which they were least agreed was the certainty, philosophical demonstrability and moral significance of the immortality of the soul, so that the deists have sometimes been grouped into "mortal" and "immortal" deists. For some the belief in future rewards and punishments was an essential of religion; some seem to have questioned the doctrine as a whole; and, while others made it a basis of morality, Shaftesbury protested against the ordinary theological form of the belief as immoral. No two thinkers could well be more opposed than Shaftesbury and Hobbes; yet sometimes ideas from both were combined by the same writer. Collins was a pronounced necessitarian; Morgan regarded the denial of free will as tantamount to atheism. And nothing can be more misleading than to assume that the belief in a Creator, existent wholly apart from the work of his hands, was characteristic of the deists as a body. In none of them is any theory on the subject specially prominent, except that in their denial of miracles, of supernatural revelation, and a special redemptive interposition of God in history, they seem to have thought of providence much as the mass of their opponents did. Herbert starts his chief theological work with the design of vindicating God's providence. Shaftesbury vigorously protests against the notion of a wholly transcendent God. Morgan more than once expresses a theory that would now be pronounced one of immanence. Toland, the inventor of the name of pantheism, was notoriously, for a great part of his life, in some sort a pantheist. And while as thinkers they diverged in their opinions, so too they differed radically in character, in reverence for their subject and in religious earnestness and moral worth.

The deists were not powerful writers; none of them was distinguished by wide and accurate scholarship; hardly any was either a deep or comprehensive thinker. But though they generally had the best scholarship of England against them, they were bold, acute, well-informed men; they appreciated more fully than their contemporaries not a few truths now all but universally accepted; and they seemed therefore entitled to leave their mark on subsequent theological thought. Yet while the seed they sowed was taking deep root in France and in Germany, the English deists, the most notable men of their time, were soon forgotten, or at least ceased to be a prominent factor in the intellectual life of the century. The controversies they had provoked collapsed, and deism became a by-word even amongst those who were in no degree anxious to appear as champions of orthodoxy.

The fault was not wholly in the subjectivism of the movement. But the subjectivism that founded its theology on the "common sense" of the individual was accompanied by a fatal pseudo-universalism which, cutting away all that was peculiar, individual and most intense in all religions, left in any one of them but a lifeless form. A theology consisting of a few vague generalities was sufficient to sustain the piety of the best of the deists; but it had not the concreteness or intensity necessary to take a firm hold on those whom it emancipated from the old beliefs. The negative side of deism came to the front, and, communicated with fatal facility, seems ultimately to have constituted the deism that was commonly professed at the clubs of the wits and the tea-tables of polite society. But the intenser religious life before which deism fell was also a revolt against the abstract and argumentative orthodoxy of the time.

That the deists appreciated fully the scope of difficulties in Christian theology and the sacred books is not their most noteworthy feature; but that they made a stand, sometimes cautiously, often with outspoken fearlessness, against the presupposition that the Bible is the religion of Protestants. They themselves gave way to another presupposition equally fatal to true historical research, though in great measure common to them and their opponents. It was assumed by deists in debating against the orthodox, that the flood of error in the hostile camp was due to the benevolent cunning or deliberate self-seeking of unscrupulous men, supported by the ignorant with the obstinacy of prejudice.

Yet deism deserves to be remembered as a strenuous protest against bibliolatry in every degree and against all traditionalism in theology. It sought to look not a few facts full in the face, from a new point of

view and with a thoroughly modern though unhistorical spirit. It was not a religious movement; and though, as a defiance of the accepted theology, its character was mainly theological, the deistical crusade belongs, not to the history of the church, or of dogma, but to the history of general culture. It was an attitude of mind, not a body of doctrine; its nearest parallel is probably to be found in the eclectic strivings of the Renaissance philosophy and the modernizing tendencies of cisalpine humanism. The controversy was assumed to be against prejudice, ignorance, obscurantism; what monks were to Erasmus the clergy as such were to Woolston. Yet English deism was in many ways characteristically English. The deists were, as usually happens with the leaders of English thought, no class of professional men, but represented every rank in the community. They made their appeal in the mother tongue to all men who could read and think, and sought to reduce the controversy to its most direct practical issue. And, with but one or two exceptions, they avoided wildness in their language as much as in the general scheme of theology they proposed. If at times they had recourse to ambiguity of speech and veiled polemic, this might be partly excused when we remember the hanging of Thomas Aikenhead in 1697 for ridiculing the Bible, and Woolston's imprisonment in 1729.

French deism, the direct progeny of the English movement, was equally short-lived. Voltaire during his three years' residence in England (1726-1729) absorbed an enthusiasm for freedom of thought, and provided himself with the arguments necessary to support the deism which he had learned in his youth; he was to the end a deist of the school of Bolingbroke. Rousseau, though not an active assailant of Christianity, could have claimed kindred with the nobler deists. Diderot was for a time heartily in sympathy with deistic thought; and the *Encyclopédie* was in its earlier portion an organ of deism. Even in the Roman Catholic Church a large number of the leading divines were frankly deistic, nor were they for that reason regarded as irreligious. But as Locke's philosophy became in France sensationalism, and as Locke's pregnant question, reiterated by Collins, how we know that the divine power might not confer thought on matter, led the way to dogmatic materialism, so deism soon gave way to forms of thought more directly and completely subversive of the traditional theology. None the less it is unquestionable that in the period preceding the Revolution the bulk of French thinkers were ultimately deists in various degrees, and that deism was a most potent factor not only in speculative but also in social and political development. Many of the leaders of the revolutionary movement were deists, though it is quite false to say that the extreme methods of the movement were the result of widespread rationalism.

In Germany there was a native free-thinking theology nearly contemporary with that of England, whence it was greatly developed and supplemented. Among the earliest names are those of Georg Schade (1712-1795), J. B. Basedow (1723-1790), the educationist, Johann August Eberhard (*q.v.*); and K. F. Bahrdt, who regarded Christ as merely a noble teacher like Moses, Confucius and Luther. The compact rational philosophy of Wolff nourished a theological rationalism which in H. S. Reimarus was wholly undistinguishable from dogmatic deism, and was undoubtedly to a great extent adopted by Lessing; while, in the case of the historico-critical school to which J. S. Sender belonged, the distinction is not always easily drawn—although these rationalists professedly recognized in Scripture a real divine revelation, mingled with local and temporary elements. It deserves to be noted here that the former, the theology of the *Aufklärung*, was, like that of the deists, destined to a short-lived notoriety; whereas the solid, accurate and scholarly researches of the rationalist critics of Germany, undertaken with no merely polemical spirit, not only form an epoch in the history of theology, but have taken a permanent place in the body of theological science. Ere *rationalismus vulgaris* fell before the combined assault of Schleiermacher's subjective theology and the deeper historical insight of the Hegelians, it had found a refuge successively in the Kantian postulates of the practical reason, and in the vague but earnest faith-philosophy of Jacobi.

Outside France, Germany and England, there were no great schools of thought distinctively deistic, though in most countries there is to be found a rationalistic anti-clerical movement which partakes of the character of deism. It seems probable, for example, that in Portugal the marquis de Pombal was in reality a deist, and both in Italy and in Spain there were signs of the same rationalistic revolt. More certain, and also more striking, is the fact that the leading statesmen in the American War of Independence were emphatically deists; Benjamin Franklin (who attributes his position to the study of Shaftesbury and Collins), Thomas Paine, Washington and Jefferson, although they all had the greatest admiration for the New Testament story, denied that it was based on any supernatural revelation. For various reasons the movement in America did not appear on the surface to any great extent, and after the comparative failure of Elihu Palmer's *Principles of Nature* it expressed itself chiefly in the spread of Unitarianism.

In England, though the deists were forgotten, their spirit was not wholly dead. For men like Hume and Gibbon the standpoint of deism was long left behind; yet Gibbon's famous two chapters might well have been written by a deist. Even now many undoubtedly cling to a theology nearly allied to deism. Rejecting miracles and denying the infallibility of Scripture, protesting against Calvinistic views of sovereign grace and having no interest in evangelical Arminianism, the faith of such inquirers seems fairly to coincide with that of the deists. Even some cultured theologians, the historical representatives of latitudinarianism, seem to accept the great body of what was contended for by the deists. Moreover, the influence of the deistic writers had an incalculable influence in the gradual progress towards tolerance, and in the spread of a broader attitude towards intellectual problems, and this too, though, as we have seen, the original deists devoted themselves mainly to a crusade against the doctrine of revelation.

The original deists displayed a singular incapacity to understand the true conditions of history; yet amongst them there were some who pointed the way to the truer, more generous interpretation of the past. When Shaftesbury wrote that "religion is still a discipline, and progress of the soul towards perfection," he gave birth to the same thought that was afterwards hailed in Lessing's *Erziehung des Menschengeschlechtes* as the dawn of a fuller and a purer light on the history of religion and on the development of the spiritual life of mankind.

AUTHORITIES.—See John Leland, *A View of the Principal Deistical Writers* (2 vols., 1754-1756; ed. 1837); G. V. Lechler, *Geschichte des englischen Deismus* (2 vols., 1841); L. Noack, *Die Freidenker in der Religion* (Bern, 1853-1855); John Hunt, *Religious Thought in England* (3 vols., 1870-1872); Leslie Stephen, *History of English Thought in the 18th Century* (2 vols., 1876); A. S. Farrar, *A Critical History of Free Thought* (1862, Bampton

Lectures); J. H. Overton and F. Relton, *The English Church from the Accession of George I. to the end of the 18th Century* (1906; especially chap. iv., "The Answer to Deism"); A. W. Benn, *History of English Rationalism in the 19th Century* (1906); i. 111 ff.; J. M. Robertson, *Short History of Free Thought* (1906); G. Ch. B. Pünjer, *Geschichte der christlichen Religionsphilosophie seit der Reformation* (Brunswick, 1880); M. W. Wiseman, *Dynamics of Religion* (London, 1897), pt. ii.; article "Deismus" in Herzog-Hauck, *Realencyklopädie* (vol. iv., 1898).

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1 The right of the orthodox party to use this name was asserted by the publication in 1715 of a journal called *The Freethinker*, conducted by anti-deistic clergymen. The term *libertin* appears to have been used first as a hostile epithet of the Brethren of the Free Spirit, a 13th-century sect which was accused not only of free-thought but also of licentious living.

2 See the separate biographies of these writers. The three most significant names after Lord Herbert are those of Toland, Wollaston and Tindal.

DEISTER, a chain of hills in Germany, in the Prussian province of Hanover, about 15 m. S.W. of the city of Hanover. It runs in a north-westerly direction from Springe in the S. to Rodenberg in the N. It has a total length of 14 m., and rises in the Höfeler to a height of 1250 ft. The chain is well-wooded and abounds in game. There are some coal mines and sandstone quarries.

DÉJAZET, PAULINE VIRGINIE (1798-1875), French actress, born in Paris on the 30th of August 1798, made her first appearance on the stage at the age of five. It was not until 1820, when she began her seven years' connexion with the recently founded Gymnase, that she won her triumphs in soubrette and "breeches" parts, which came to be known as "*Déjazets*." From 1828 she played at the Nouveautés for three years, then at the Variétés, and finally became manager, with her son, of the Folies, which was renamed the Théâtre Déjazet. Here, even at the age of sixty-five, she had marvellous success in youthful parts, especially in a number of Sardou's earlier plays, previously unacted. She retired in 1868, and died on the 1st of December 1875, leaving a great name in the annals of the French stage.

See Duval's *Virginie Déjazet* (1876).

DE KALB, a city of De Kalb county, Illinois, U.S.A., in the N. part of the state, about 58 m. W. of Chicago. Pop. (1890) 2579; (1900) 5904 (1520 foreign-born); (1910) 8102. De Kalb is served by the Chicago Great Western, the Chicago & North-Western, and the Illinois, Iowa & Minnesota railways, and by interurban electric lines. It is the seat of the Northern Illinois state normal school (opened in 1899). The principal manufactures of De Kalb are woven and barbed wire, waggons and agricultural implements, pianos, shoes, gloves, and creamery packages. The city has important dairy interests also. De Kalb was first settled in 1832, was known as Buena Vista until 1840, was incorporated as a village in 1861, and in 1877 was organized under the general state law as a city.

DE KEYSER, THOMAS (1596 or 1597-1667), Dutch painter, was born at Amsterdam, the son of the architect and sculptor Hendrik de Keyser. We have no definite knowledge of his training, and but scant information as to the course of his life, though it is known that he owned a basalt business between 1640 and 1654. Aert Pietersz, Cornelis vanider Voort, Werner van Valckert and Nicolas Elias are accredited by different authorities with having developed his talent; and M. Karl Woermann, who has pronounced in favour of Nicolas Elias is supported by the fact that almost all that master's pictures were formerly attributed to De Keyser, who, in like fashion, exercised some influence upon Rembrandt when he first went to Amsterdam in 1631. De Keyser chiefly excelled as a portrait painter, though he also executed some historical and mythological pictures, such as the "Theseus" and "Ariadne" in the Amsterdam town hall. His portraiture is full of character and masterly in handling, and often, as in the "Old Woman" of the Budapest gallery, is distinguished by a rich golden glow of colour and Rembrandtesque chiaroscuro. Some of his portraits are life-size, but the artist generally preferred to keep them on a considerably smaller scale, like the famous "Group of Amsterdam Burgomasters" assembled to receive Marie de' Medici in 1638, now at the Hague museum. The sketch for this important painting, together with three other drawings, was sold at the Gallitzin sale in 1783 for the sum of threepence. The German emperor owns an "Equestrian Portrait of a young Dutchman," by De Keyser, a late work which in general disposition and in the soft manner of painting recalled the work of Cuyp. Similar pictures are in the Dresden and Frankfort museums, in the Heyl collection at Worms, and the

Liechtenstein Gallery in Vienna. The National Gallery, London, owns a characteristic portrait group of a "Merchant with his Clerk"; the Hague museum, besides the group already referred to, a magnificent "Portrait of a Savant," and the Haarlem museum a fine portrait of "Claes Fabricius." At the Ryks Museum in Amsterdam there are no fewer than twelve works from his brush, and other important examples are to be found in Brussels, Munich, Copenhagen and St Petersburg.

DEKKER, EDWARD DOUWES (1820-1887), Dutch writer, commonly known as Multatuli, was born at Amsterdam on the 2nd of March 1820. His father, a ship's captain, intended his son for trade, but this humdrum prospect disgusted him, and in 1838 he went out to Java, and obtained a post in the Inland Revenue. He rose from one position to another, until, in 1851, he found himself assistant-resident at Amboyna, in the Moluccas. In 1857 he was transferred to Lebak, in the Bantam residency of Java. By this time, however, all the secrets of Dutch administration were known to him, and he had begun to protest against the abuses of the colonial system. In consequence he was threatened with dismissal from his office for his openness of speech, and, throwing up his appointment, he returned to Holland in a state of fierce indignation. He determined to expose in detail the scandals he had witnessed, and he began to do so in newspaper articles and pamphlets. Little notice, however, was taken of his protestations until, in 1860, he published, under the pseudonym of "Multatuli," his romance entitled *Max Havelaar*. An attempt was made to ignore this brilliant and irregular book, but in vain; it was read all over Europe. The exposure of the abuse of free labour in the Dutch Indies was complete, although there were not wanting apologists who accused Dekker's terrible picture of being over-coloured. He was now fairly launched on literature, and he lost no time in publishing *Love Letters* (1861), which, in spite of their mild title, proved to be mordant satires of the most rancorous and unsparing kind. The literary merit of Multatuli's work was much contested; he received an unexpected and most valuable ally in Vosmaer. He continued to write much, and to faggot his miscellanies in uniform volumes called *Ideas*, of which seven appeared between 1862 and 1877. Douwes quitted Holland, snaking off her dust from his feet, and went to live at Wiesbaden. He now made several attempts to gain the stage, and one of his pieces, *The School for Princes*, 1875 (published in the fourth volume of *Ideas*), pleased himself so highly that he is said to have styled it the greatest drama ever written. It is a fine poem, written in blank verse, like an English tragedy, and not in Dutch Alexandrines; but it is undramatic, and has not held the boards. Douwes Dekker moved his residence to Nieder Ingelheim, on the Rhine, and there he died on the 19th of February 1887.

Towards the end of his career he was the centre of a crowd of disciples and imitators, who did his reputation no service; he is now, again, in danger of being read too little. To understand his fame, it is necessary to remember the sensational way in which he broke into the dulness of Dutch literature fifty years ago, like a flame out of the Far East. He was ardent, provocative, perhaps a little hysterical, but he made himself heard all over Europe. He brought an exceedingly severe indictment against the egotism and brutality of the administrators of Dutch India, and he framed it in a literary form which was brilliantly original. Not satisfied with this, he attacked, in a fury that was sometimes blind, everything that seemed to him falsely conventional in Dutch religion, government, society and morals. He respected nothing, he left no institution untouched. Now that it is possible to look back upon Multatuli without passion, we see in him, not what Dutch enthusiasm saw,—"the second writer of Europe in the nineteenth century" (Victor Hugo being presumably the first),—but a great man who was a powerful and glowing author, yet hardly an artist, a reckless enthusiast, who was inspired by indignation and a burning sense of justice, who cared little for his means if only he could produce his effect. He is seen to his best and worst in *Max Havelaar*; his *Ideas*, hard, fantastic and sardonic, seldom offer any solid satisfaction to the foreign reader. But Multatuli deserves remembrance, if only on account of the unequalled effect his writing had in rousing Holland from the intellectual and moral lethargy in which she lay half a century ago.

(E. G.)

DEKKER, JEREMIAS DE (1610-1666), Dutch poet, was born at Dort in 1610. His father was a native of Antwerp, who, having embraced the reformed religion, had been compelled to take refuge in Holland. Entering his father's business at an early age, he found leisure to cultivate his taste for literature and especially for poetry, and to acquire without assistance a competent knowledge of English, French, Latin and Italian. His first poem was a paraphrase of the Lamentations of Jeremiah (*Klaagliederen van Jeremias*), which was followed by translations and imitations of Horace, Juvenal and other Latin poets. The most important of his original poems were a collection of epigrams (*Puntdichten*) and a satire in praise of avarice (*Lof der Geldzucht*). The latter is his best-known work. Written in a vein of light and yet effective irony, it is usually ranked by critics along with Erasmus's *Praise of Folly*. Dekker died at Amsterdam in November 1666.

A complete collection of his poems, edited by Brouerius van Nideck, was published at Amsterdam in 1726 under the title *Exercices poétiques* (2 vols. 4to.). Selections from his poems are included in Siegenbeck's *Proeven van nederduitsche Dichtkunde* (1823), and from his epigrams in Geijsbeek's *Epigrammatische Anthologie* (1827).

DEKKER (or DECKER), **THOMAS** (*c.* 1570-1641), English dramatist, was born in London. His name occurs frequently in Henslowe's *Diary* during the last three years of the 16th century; he is mentioned there as receiving loans and payments for writing plays in conjunction with Ben Jonson, Drayton, Chettle, Haughton, Wilson, Day and others, and he would appear to have been then in the most active employment as a playwright. The titles of the plays on which he was engaged from April 1599 to March 1599/1600 are *Troilus and Cressida*, *Orestes Fures*, *Agamemnon*, *The Gentle Craft*, *The Stepmother's Tragedy*, *Bear a Brain*, *Pagge of Plymouth*, *Robert the Second*, *The Whole History of Fortunatus*, *Patient Grissel*, *Truth's Supplication to Candlelight*, *The Spanish Moor's Tragedy*, *The Seven Wise Masters*. At that date it is evident that Dekker's services were in great request for the stage. He is first mentioned in the Diary under date 8th of January 1597/1598, as having sold a book, *i.e.* the manuscript of a play; the payments in 1599 are generally made in advance, "in earnest" of work to be done. In the case of three of the above plays, *Orestes Fures*, *Truth's Supplication* and *The Gentle Craft*, Dekker is paid as the sole author. Only *The Gentle Craft* has been preserved; it was published anonymously in 1600 under the title of *The Shoemaker's Holiday*. It would be unsafe to argue from the classical subjects of some of these plays that Dekker was then a young man from the university, who had come up like so many others to make a living by writing for the stage. Classical knowledge was then in the air; playwrights in want of a subject were content with translations, if they did not know the originals. However educated, Dekker was then a young man just out of his teens, if he spoke with any accuracy when he said that he was threescore in 1637. And it was not in scholarly themes that he was destined to find his true vein. The call for the publication of *The Gentle Craft*, which deals with the life of the city, showed him where his strength lay.

To give a general idea of the substance of Dekker's plays, there is no better way than to call him the Dickens of the Elizabethan period. The two men were as unlike as possible in their habits of work, Dekker having apparently all the thriftlessness and impecunious shamelessness of Micawber himself. Henslowe's *Diary* contains two notes of payments made in 1597/1598 and 1598/1599 to release Dekker from prison, and he is supposed to have spent the years between 1613 and 1616 in the King's Bench. Dekker's Bohemianism appears in the slightness and hurry of his work, a strong contrast to the thoroughness and rich completeness of every labour to which Dickens applied himself; perhaps also in the exquisite freshness and sweetness of his songs, and the natural charm of stray touches of expression and description in his plays. But he was like Dickens in the bent of his genius towards the representation of the life around him in London, as well as in the humorous kindliness of his way of looking at that life, his vein of sentiment, and his eye for odd characters, though the random pickings of Dekker, hopping here and there in search of a subject, give less complete results than the more systematic labours of Dickens. Dekker's Simon Eyre, the good-hearted, mad shoemaker, and his Orlando Friscobaldo, are touched with a kindly humour in which Dickens would have delighted; his Infelices, Fiamettas, Tormiellas, even his Bellafront, have a certain likeness in type to the heroines of Dickens; and his roaring blades and their gulls are prototypes of Sir Mulberry Hawk and Lord Frederick Verisopht. Only there is this great difference in the spirit of the two writers, that Dekker wrote without the smallest apparent wish to reform the life that he saw, desiring only to exhibit it; and that on the whole, apart from his dramatist's necessity of finding interesting matter, he cast his eye about rather with a liking for the discovery of good under unpromising appearances than with any determination to detect and expose vice. The observation must also be made that Dekker's personages have much more individual character, more of that mixture of good and evil which we find in real human beings. Hack-writer though Dekker was, and writing often under sore pressure, there is no dramatist whose personages have more of the breath of life in them; drawing with easy, unconstrained hand, he was a master of those touches by which an imaginary figure is brought home to us as a creature with human interests. A very large part of the motive power in his plays consists in the temporary yielding to an evil passion. The kindly philosophy that the best of natures may be for a time perverted by passionate desires is the chief animating principle of his comedy. He delights in showing women listening to temptation, and apparently yielding, but still retaining sufficient control over themselves to be capable of drawing back when on the verge of the precipice. The wives of the citizens were his heroines, pursued by the unlawful addresses of the gay young courtiers; and on the whole Dekker, from inclination apparently as well as policy, though himself, if Ben Jonson's satire had any point, a bit of a dandy in his youth, took the part of morality and the city, and either struck the rakes with remorse or made the objects of their machinations clever enough to outwit them. From Dekker's plays we get a very lively impression of all that was picturesque and theatrically interesting in the city life of the time, the interiors of the shops and the houses, the tastes of the citizens and their wives, the tavern and tobacco-shop manners of the youthful aristocracy and their satellites. The social student cannot afford to overlook Dekker; there is no other dramatist of that age, except Thomas Middleton, from whom we can get such a vivid picture of contemporary manners in London. He drew direct from life; in so far as he idealized, he did so not in obedience to scholarly precepts or dogmatic theories, but in the immediate interests of good-natured farce and tender-hearted sentiment.

In all the serious parts of Dekker's plays there is a charming delicacy of touch, and his smallest scraps of song are bewitching; but his plays, as plays, owe much more to the interest of the characters and the incidents than to any excellence of construction. We see what use could be made of his materials by a stronger intellect in *Westward Ho!* which he wrote in conjunction with John Webster. The play, somehow, though the parts are more firmly knit together, and it has more unity of purpose, is not so interesting as Dekker's unaided work. Middleton formed a more successful combination with Dekker than Webster; there is some evidence that in *The Honest Whore*, or *The Converted Courtesan*, which is generally regarded as the best that bears Dekker's name, he had the assistance of Middleton, although the assistance was so immaterial as not to be worth acknowledging in the title-page. Still that Middleton, a man of little genius but of much practical talent and robust humour, was serviceable to Dekker in determining the form of the play may well be believed. The two wrote another play in concert, *The Roaring Girl*, for which Middleton probably contributed a good deal of the matter, as well as a more symmetrical form than Dekker seems to have been capable of devising. In *The Witch of Edmonton*, except in a few scenes, it is difficult to trace the hand of Dekker with any certainty; his collaborators were John Ford and William Rowley; to Ford probably belongs the intense brooding and murderous wrath of the old hag, which are too direct and hard in their energy for Dekker, while Rowley may be supposed to be responsible for the delineation of country life. *The Virgin*

Martyr, one of the best constructed of his plays, was written in conjunction with Massinger, to whom the form is no doubt due. Dekker's plays contain a few songs which show him to have been possessed of very great lyrical skill, but of this he seems to have made sadly little use. His poem of *Canaans Calamitie*—if indeed it be his, which is hard to believe—is exceedingly poor stuff, and the verse portion of his *Dreame*, though containing some good lines, is, as a whole, not much better.

When Gerard Langbaine wrote his *Account of the English Dramatic Poets* in 1691, he spoke of Dekker as being "more famous for the contention he had with Ben Jonson for the bays, than for any great reputation he had gained by his own writings." This is an opinion that could not be professed now, when Dekker's work is read. In the contention with Ben Jonson, one of the most celebrated quarrels of authors, the origin of which is matter of dispute, Dekker seems to have had very much the best of it. We can imagine that Jonson's attack was stinging at the time, because it seems to be full of sarcastic personalities, but it is dull enough now when nobody knows what Dekker was like, nor what was the character of his mother. There is nothing in the *Poetaster* that has any point as applied to Dekker's powers as a dramatist, while, on the contrary, *Satiromastix, or the Untrussing of the Humorous Poet* is full of pungent ridicule of Jonson's style, and of retorts and insults conceived in the happiest spirit of good-natured mockery. Dekker has been accused of poverty of invention in adopting the character of the *Poetaster*, but it is of the very pith of the jest that Dekker should have set on Jonson's own foul-mouthed Captain Tucca to abuse Horace himself.

Works.—*The Pleasant Comedie of Old Fortunatus* (1600); *The Shomakers Holiday. Or The gentle Craft. With the humorous life of Simon Eyre, shoomaker, and Lord Maior of London* (1600); *Satiromastix. Or The untrussing of the Humorous Poet* (1602); *The Pleasant Comodie of Patient Grissill* (1603), with Chettle and Haughton; *The Honest Whore. With The Humours of the Patient Man, and the Longing Wife* (1604); *North-Ward Hoe* (1607), with John Webster; *West-Ward Hoe* (1607), with John Webster; *The Whore of Babylon* (1607); *The Famous History of Sir Thomas Wyat. With the Coronation of Queen Mary, and the coming in of King Philip* (1607), with John Webster; *The Roaring Girle. Or Moll Cut-Purse* (1611), with Thomas Middleton; *The Virgin Martir* (1622), with Massinger; *If It Be Not Good, the Divel is in it* (1612); *The Second Part of the Honest Whore. With the Humors of the Patient Man, the Impatient Wife; the Honest Whore, perswaded by strong Arguments to turne Curtizan againe; her brave refuting those Arguments. And lastly, the Comicall Passages of an Italian Bridewell, where the Scaene ends* (1630); *A Tragi-Comedy: Called, Match mee in London* (1631); *The Wonder of a Kingdome* (1636); *The Witch of Edmonton. A known true Story. Composed into a Tragi-Comedy* (1658), with William Rowley and John Ford. *The Sun's Darling* (1656) was possibly written by Ford and Dekker, or may be perhaps more correctly regarded as a recast by Ford of a masque by Dekker, perhaps his lost play of *Phaëton*. The pageants for the Lord Mayor's shows of 1612 and 1629 were written by Dekker, and both are preserved. His tracts are invaluable for the light which they throw on the London of his time, especially in their descriptions of the circumstances of the theatre. Their titles, many of which are necessarily abbreviated, are: *Canaans Calamitie, Jerusalems Miserie, and Englands Mirror* (1598), in verse; *The Wonderfull Yeare 1603. Wherein is shewed the picture of London lying sicke of the Plague* (1603); *The Batchelars Banquet* (1603); a brilliant adaptation of *Les Quinze Joyes de mariage*; the *Seven Deadly Sinnes of London* (1606); *Newes from Hell, Brought by the Divells Carrier* (1606), reprinted in the next year with some interesting additions as *A Knights Conjuring; Jests to make you Merie* (1607), with George Wilkins; *The Belman of London: Bringing to Light the most notorious villanies that are now practised in the Kingdome* (1608); followed by a second part and enlarged editions under other titles; *The Dead Tearme* (1608); *The Ravens Almanacke, foretelling of a Plague, Famine and Civill Warre* (1609), ridiculing the almanac makers; *The Guls Horne-booke* (1609), the most famous of all his tracts, providing a code of manners for the Elizabethan gallant, in the aisle of St Paul's, at the ordinary, at the playhouse, and other resorts; *Worke for Armorours, or the Peace is Broken* (1609); *Foure Birds of Noahs Ark* (1609); *A Strange Horse-Race* (1613); *Dekker his Dreame ...* (1620), in verse and prose, illustrated with a woodcut of the dreamer; and *A Rod for Run-awayes* (1625). This long list does not exhaust Dekker's work, much of which is lost.

Authorities.—An edition of the collected dramatic works of Dekker by R. H. Shepherd appeared in 1873; his prose tracts and poems were included in Dr A. B. Grosart's *Huth Library* (1884-1886): both these contain memoirs of him, but by far the most complete account of his life and writings is to be found in the article by A. H. Bullen in the *Dictionary of National Biography*. See also the elaborate discussion of his plays in Mr Fleay's *Biographical Chronicle* (1891), i. 115, &c., and, for his quarrel with Ben Jonson, Prof. J. H. Penniman's *War of the Theatres* (Boston, 1897) and Mr R. A. Small's *Stage Quarrel between Ben Jonson and the so-called Poetasters* (Breslau, 1899). A selection from his plays was edited for the Mermaid Series (1887; new series, 1904) by Ernest Rhys. An essay on Dekker by A. C. Swinburne appeared in *The Nineteenth Century* for January 1887.

(W. M.; R. B. McK.)

DE LA BECHE, SIR HENRY THOMAS (1796-1855), English geologist, was born in the year 1796. His father, an officer in the army, possessed landed property in Jamaica, but died while his son was still young. The boy accordingly spent his youth with his mother at Lyme Regis among the interesting and picturesque coast cliffs of the south-west of England, where he imbibed a love for geological pursuits and cultivated a marked artistic faculty. When fourteen years of age, being destined, like his friend Murchison, for the military profession, he entered the college at Great Marlow, where he distinguished himself by the rapidity and skill with which he executed sketches showing the salient features of a district. The peace of 1815, however, changed his career and he devoted himself with ever-increasing assiduity to the pursuit of geology. When only twenty-one years of age he joined the Geological Society of London, continuing throughout life to be one of its most active, useful and honoured members. He was president in 1848-1849. Possessing a fortune sufficient for the gratification of his tastes, he visited many localities of geological interest, not only in Britain, but also on the continent, in France and Switzerland. His journeys seldom failed to bear fruit in suggestive papers accompanied by sketches. Early attachment to the south-west of England led him back to that region, where, with enlarged experience, he began the detailed investigation of the rocks of Cornwall

and Devon. Thrown much into contact with the mining community of that part of the country, he conceived the idea that the nation ought to compile a geological map of the United Kingdom, and collect and preserve specimens to illustrate, and aid in further developing, its mineral industries. He showed his skilful management of affairs by inducing the government of the day to recognize his work and give him an appointment in connexion with the Ordnance Survey. This formed the starting point of the present Geological Survey of Great Britain, which was officially recognized in 1835, when De la Beche was appointed director. Year by year increasing stores of valuable specimens were transmitted to London; and the building at Craig's Court, where the young Museum of Economic Geology was placed, became too small. But De la Beche, having seen how fruitful his first idea had become, appealed to the authorities not merely to provide a larger structure, but to widen the whole scope of the scientific establishment of which he was the head, so as to impart to it the character of a great educational institution where practical as well as theoretical instruction should be given in every branch of science necessary for the conduct of mining work. In this endeavour he was again successful. Parliament sanctioned the erection of a museum in Jermyn Street, London, and the organization Of a staff of professors with laboratories and other appliances. The establishment, in which were combined the offices of the Geological Survey, the Museum of Practical Geology, The Royal School of Mines and the Mining Record Office, was opened in 1851. Many foreign countries have since formed geological surveys avowedly based upon the organization and experience of that of the United Kingdom. The British colonies, also, have in many instances established similar surveys for the development of their mineral resources, and have had recourse to the parent survey for advice and for officers to conduct the operations.

De la Beche published numerous memoirs on English geology in the *Transactions of the Geological Society of London*, as well as in the *Memoirs of the Geological Survey*, notably the *Report on the Geology of Cornwall, Devon and West Somerset* (1839). He likewise wrote *A Geological Manual* (1831; 3rd ed., 1833); and a work of singular breadth and clearness—*Researches in Theoretical Geology* (1834)—in which he enunciated a philosophical treatment of geological questions much in advance of his time. An early volume, *How to Observe Geology* (1835 and 1836), was rewritten and enlarged by him late in life, and published under the title of *The Geological Observer* (1851; 2nd ed., 1853). It was marked by wide practical experience, multifarious knowledge, philosophical insight and a genius for artistic delineation of geological phenomena. He was elected F.R.S. in 1819. He received the honour of knighthood in 1848, and near the close of his life was awarded the Wollaston medal—the highest honour in the gift of the Geological Society of London. After a life of constant activity he began to suffer from partial paralysis, but, though becoming gradually worse, continued able to transact his official business until a few days before his death, which took place on the 13th of April 1855.

See Sir A. Geikie's *Memoir of Sir A. C. Ramsay* (1895), which contains a sketch of the history of the Geological Survey, and of the life of De la Beche (with portrait); also *Summary of Progress of the Geological Survey for 1897* (1898).

DELABORDE, HENRI FRANÇOIS, Count (1764-1833), French soldier, was the son of a baker of Dijon. At the outbreak of the French Revolution he joined the "Volunteers of the Côte-d'Or," and passing rapidly through all the junior grades, was made general of brigade after the combat of Rhein-Zabern (1793). As chief of the staff he was present at the siege of Toulon in the same year, and, promoted general of division, he was for a time governor of Corsica. In 1794 Delaborde served on the Spanish frontier, distinguishing himself at the Bidassoa (July 25) and Misquiriz (October 16). His next command was on the Rhine. At the head of a division he took part in the celebrated campaigns of 1795-97, and in 1796 covered Moreau's right when that general invaded Bavaria. Delaborde was in constant military employment during the Consulate and the early Empire. Made commander of the Legion of Honour in 1804, he received the dignity of count in 1808. In that year he was serving in Portugal under Junot. Against Sir Arthur Wellesley's English army he fought the skillful brilliant rear-guard action of Rolica. In 1812 he was one of Mortier's divisional leaders in the Russian War, and in the following year was grand cross and governor of the castle of Compiègne. Joining Napoleon in the Hundred Days, he was marked for punishment by the returning Bourbons, sent before a court-martial, and only escaped condemnation through a technical flaw in the wording of the charge. The rest of his life was spent in retirement.

DELACROIX, FERDINAND VICTOR EUGÈNE (1798-1863), French historical painter, leader of the Romantic movement, was born at Charenton-St-Maurice, near Paris, on the 26th of April 1798. His father Charles Delacroix (1741-1805) was a partisan of the most violent faction during the time of the Revolution, and was foreign minister under the Directory. The family affairs seem to have been conducted in the wildest manner, and the accidents that befell the child, well authenticated as they are said to be, make it almost a miracle that he survived. He was first nearly burned to death in the cradle by a nurse falling asleep over a novel and the candle dropping on the coverlet; this left permanent marks on his arms and face. He was next dropped into the sea by another *bonne*, who was climbing up a ship's side to see her lover. He was nearly poisoned, and nearly choked, and, to crown all, he tried to hang himself, without any thought of suicide, in imitation of a print exhibiting a man in that position of final ignominy. The prediction of a charlatan founded on his horoscope has been preserved: "Cet enfant deviendra un homme célèbre, mais sa vie sera des plus laborieuses, des plus tourmentées, et toujours livrée à la contradiction."

Delacroix the elder (also known as Delacroix de Contaut) died at Bordeaux when Eugène was seven years

of age, and his mother returned to Paris and placed him in the Lycée Napoléon. Afterwards, on his determining to be a painter, he entered the *atelier* of Baron Guérin, who affected to treat him as an amateur. His fellow-pupil was Ary Scheffer, who was alike by temperament and antecedents the opposite of the *bizarre* Delacroix, and the two remained antagonistic to the end of life. Delacroix's acknowledged power and yet want of success with artists and critics—Thiers being his only advocate—perhaps mainly resulted from his bravura and rude dash in the use of the brush, at a time when smooth roundness of surface was general. His first important picture, "Dante and Virgil," was painted in his own studio; and when Guérin went to see it he flew into a passion, and told him his picture was absurd, detestable, exaggerated. "Why ask me to come and see this? You knew what I must say." Yet his work was received at the Salon, and produced an enthusiasm of debate (1822). Some said Géricault had worked on it, but all treated it with respect. Still in private his position, even after the larger tragic picture, the "Massacre of Chios," had been deposited in the Luxembourg by the government (1824), became that of an Ishmaelite. The war for the freedom of Greece then going on moved him deeply, and his next two pictures—"Marino Faliero Decapitated on the Giant's Staircase of the Ducal Palace" (which has always remained a European success), and "Greece Lamenting on the Ruins of Missolonghi"—with many smaller works, were exhibited for the benefit of the patriots in 1826. This exhibition was much visited by the public, and next year he produced another of his important works, "Sardanapalus," from Byron's drama. After this, he says, "I became the abomination of painting, I was refused water and salt,"—but, he adds with singularly happy naïveté, "J'étais enchanté de moi-même!" The patrimony he inherited, or perhaps it should be said, what remained of it, was 10,000 *livres de rente*, and with economy he lived on this, and continued the expensive process of painting large historical pictures. In 1831 he reappeared in the Salon with six works, and immediately after left for Morocco, where he found much congenial matter. Delacroix never went to Italy; he refused to go on principle, lest the old masters, either in spirit or manner, should impair his originality and self-dependence. His greatest admiration in literature was the poetry of Byron; Shakespeare also attracted him for tragic inspirations; and of course classic subjects had their turn of his easel.

He continued his work indefatigably, having his pictures very seldom favourably received at the Salon. These were sometimes very large, full of incidents, with many figures. "Drawing of Lots in the Boat at Sea," from Byron's *Don Juan*, and the "Taking of Constantinople by the Christians" were of that character, and the former was one of his noblest creations. In 1845 he was employed to decorate the library of the Luxembourg, that of the chamber of deputies in 1847, the ceiling of the gallery of Apollo in the Louvre in 1849 and that of the Salon de la Paix in the hôtel de ville in 1853. He died on the 13th of August 1863, and in August 1864 an exhibition of his works was opened on the Boulevard des Italiens. It contained 174 pictures, many of them of large dimensions, and 303 drawings, showing immense perseverance as well as energy and versatility. As a colourist, and a romantic painter, he now ranks among the greatest of French artists.

See also A. Robaut, *Delacroix* (1885); E. Dargenty, *Delacroix par lui-même* (1885); G. Moreau, *Delacroix et son œuvre* (1893); Dorothy Bussy, *Eugène Delacroix* (1907).

DE LA GARDIE, MAGNUS GABRIEL, Count (1622-1686), Swedish statesman, the best-known member of an ancient family of French origin (the D'Escouperies of Languedoc) which had been settled in Sweden since the 14th century. After a careful education, completed by the usual grand tour, Magnus learned the art of war under Gustavus Horn, and during the reign of Christina (1644-1654), whose prime favourite he became, though the liaison was innocent enough, he was raised to the highest offices in the state and loaded with distinctions. In 1646 he was sent at the head of an extraordinary mission to France, and on his return married the queen's cousin Marie Euphrosyne of Zweibrücken, who, being but a poor princess, benefited greatly by her wedding with the richest of the Swedish magnates. Immediately afterwards, De la Gardie was made a senator, governor-general of Saxony during the last stages of the Thirty Years' War, and, in 1652, lord high treasurer. In 1653 he fell into disgrace and had to withdraw from court. During the reign of Charles X. (1654-1660) he was employed in the Baltic provinces both as a civilian and a soldier, although in the latter capacity he gave the martial king but little satisfaction. Charles X. nevertheless, in his last will, appointed De la Gardie grand-chancellor and a member of the council of regency which ruled Sweden during the minority of Charles XI. (1660-1672). During this period De la Gardie was the ruling spirit of the government and represented the party of warlike adventure as opposed to the party of peace and economy led by Counts Bonde and Brahe (*qq.v.*). After a severe struggle De la Gardie's party finally prevailed, and its triumph was marked by that general decline of personal and political morality which has given to this regency its unenviable reputation. It was De la Gardie who first made Sweden the obsequious hireling of the foreign power which had the longest purse. The beginning of this shameful "subsidy policy" was the treaty of Fontainebleau, 1661, by a secret paragraph of which Sweden, in exchange for a considerable sum of money, undertook to support the French candidate on the first vacancy of the Polish throne. It was not, however, till the 14th of April 1672 that Sweden, by the treaty of Stockholm, became a regular "mercenarius Galliae," pledging herself, in return for 400,000 *écus* per annum in peace and 600,000 in war time, to attack with 16,000 men those German princes who might be disposed to assist Holland. The early disasters of the unlucky war of 1675-1679 were rightly attributed to the carelessness, extravagance, procrastination and general incompetence of De la Gardie and his high aristocratic colleagues. In 1675 a special commission was appointed to inquire into their conduct, and on the 27th of May 1682 it decided that the regents and the senate were solely responsible for dilapidations of the realm, the compensation due by them to the crown being assessed at 4,000,000 *daler* or £500,000. De la Gardie was treated with relative leniency, but he "received permission to retire to his estates for the rest of his life" and died there in comparative poverty, a mere shadow of his former magnificent self. The best sides of his character were his brilliant social gifts and his intense devotion to literature and art.

See Martin Veibull, *Sveriges Storhetstid* (Stockholm, 1881); *Sv. Hist.* iv.; Robert Nisbet Bain, *Scandinavia*

(Cambridge, 1905).

(R. N. B.)

DELAGOA BAY (Port. for the bay "of the lagoon"), an inlet of the Indian Ocean on the east coast of South Africa, between 25° 40′ and 26° 20′ S., with a length from north to south of over 70 m. and a breadth of about 20 m. The bay is the northern termination of the series of lagoons which line the coast from Saint Lucia Bay. The opening is toward the N.E. The southern part of the bay is formed by a peninsula, called the Inyak peninsula, which on its inner or western side affords safe anchorage. At its N.W. point is Port Melville. North of the peninsula is Inyak Island, and beyond it a smaller island known as Elephant's Island.

In spite of a bar at the entrance and a number of shallows within, Delagoa Bay forms a valuable harbour, accessible to large vessels at all seasons of the year. The surrounding country is low and very unhealthy, but the island of Inyak has a height of 240 ft., and is used as a sanatorium. A river 12 to 18 ft. deep, known as the Manhissa or Komati, enters the bay at its northern end; several smaller streams, the Matolla, the Umbelozi, and the Tembi, from the Lebombo Mountains, meet towards the middle of the bay in the estuary called by the Portuguese the Espirito Santo, but generally known as the English river; and the Maputa, which has its headwaters in the Drakensberg, enters in the south, as also does the Umfusi river. These rivers are the haunts of the hippopotamus and the crocodile.

The bay was discovered by the Portuguese navigator Antonio de Campo, one of Vasco da Gama's companions, in 1502, and the Portuguese post of Lourenço Marques was established not long after on the north side of the English river. In 1720 the Dutch East India Company built a fort and "factory" on the spot where Lourenço Marques now stands; but in 1730 the settlement was abandoned. Thereafter the Portuguese had—intermittently—trading stations in the Espirito Santo. These stations were protected by small forts, usually incapable, however, of withstanding attacks by the natives. In 1823 Captain (afterwards Vice-Admiral) W. F. W. Owen, of the British navy, finding that the Portuguese exercised no jurisdiction south of the settlement of Lourenço Marques, concluded treaties of cession with native chiefs, hoisted the British flag, and appropriated the country from the English river southwards; but when he visited the bay again in 1824 he found that the Portuguese, disregarding the British treaties, had concluded others with the natives, and had endeavoured (unsuccessfully) to take military possession of the country. Captain Owen rehoisted the British flag, but the sovereignty of either power was left undecided till the claims of the Transvaal Republic rendered a solution of the question urgent. In the meantime Great Britain had taken no steps to exercise authority on the spot, while the ravages of Zulu hordes confined Portuguese authority to the limits of their fort. In 1835 Boers, under a leader named Orich, had attempted to form a settlement on the bay, which is the natural outlet for the Transvaal; and in 1868 the Transvaal president, Marthinus Pretorius, claimed the country on each side of the Maputa down to the sea. In the following year, however, the Transvaal acknowledged Portugal's sovereignty over the bay. In 1861 Captain Bickford, R.N., had declared Inyak and Elephant islands British territory; an act protested against by the Lisbon authorities. In 1872 the dispute between Great Britain and Portugal was submitted to the arbitration of M. Thiers, the French president; and on the 19th of April 1875 his successor, Marshal MacMahon, declared in favour of the Portuguese. It had been previously agreed by Great Britain and Portugal that the right of pre-emption in case of sale or cession should be given to the unsuccessful claimant to the bay. Portuguese authority over the interior was not established until some time after the MacMahon award; nominally the country south of the Manhissa river was ceded to them by the Matshangana chief Umzila in 1861. In 1889 another dispute arose between Portugal and Great Britain in consequence of the seizure by the Portuguese of the railway running from the bay to the Transvaal. This dispute was referred to arbitration, and in 1900 Portugal was condemned to pay nearly £1,000,000 in compensation to the shareholders in the railway company. (See Lourenço Marques and Gazaland.)

For an account of the Delagoa Bay arbitration proceedings see Sir E. Hertslet, *The Map of Africa by Treaty*, iii. 991-998 (London, 1909). Consult also the British blue-book, *Delagoa Bay, Correspondence respecting the Claims of Her Majesty's Government* (London, 1875); L. van Deventer, *La Hollande et la Baie Delagoa* (The Hague, 1883); G. McC. Theal, *The Portuguese in South Africa* (London, 1896), and *History of South Africa since September 1795*, vol. v. (London, 1908). *The Narrative of Voyages to explore the shores of Africa ... performed ... under direction of Captain W. F. W. Owen, R.N.* (London, 1833) contains much interesting information concerning the district in the early part of the 19th century.

DELAMBRE, JEAN BAPTISTE JOSEPH (1749-1822), French astronomer, was born at Amiens on the 19th of September 1749. His college course, begun at Amiens under the abbé Jacques Delille, was finished in Paris, where he took a scholarship at the college of Plessis. Despite extreme penury, he then continued to study indefatigably ancient and modern languages, history and literature, finally turning his attention to mathematics and astronomy. In 1771 he became tutor to the son of M. d'Assy, receiver-general of finances; and while acting in this capacity, attended the lectures of J. J. Lalande, who, struck with his remarkable acquirements, induced M. d'Assy in 1788 to install an observatory for his benefit at his own residence. Here Delambre observed and computed almost uninterruptedly, and in 1790 obtained for his Tables of Uranus the prize offered by the academy of sciences, of which body he was elected a member two years later. He was admitted to the Institute on its organization in 1795, and became, in 1803, perpetual secretary to its mathematical section. He, moreover, belonged from 1795 to the bureau of longitudes. From 1792 to 1799 he

was occupied with the measurement of the arc of the meridian extending from Dunkirk to Barcelona, and published a detailed account of the operations in *Base du système métrique* (3 vols., 1806, 1807, 1810), for which he was awarded in 1810 the decennial prize of the Institute. The first consul nominated him inspector-general of studies; he succeeded Lalande in 1807 as professor of astronomy at the Collège de France, and filled the office of treasurer to the imperial university from 1808 until its suppression in 1815. Delambre died at Paris on the 19th of August 1822. His last years were devoted to researches into the history of science, resulting in the successive publication of: *Histoire de l'astronomie ancienne* (2 vols., 1817); *Histoire de l'astronomie au moyen âge* (1819); *Histoire de l'astronomie moderne* (2 vols., 1821); and *Histoire de l'astronomie au XVIII^e siècle*, issued in 1827 under the care of C. L. Mathieu. These books show marvellous erudition; but some of the judgments expressed in them are warped by prejudice; they are diffuse in style and overloaded with computations. He wrote besides: *Tables écliptiques des satellites de Jupiter*, inserted in the third edition of J. J. Lalande's *Astronomie* (1792), and republished in an improved form by the bureau of longitudes in 1817; *Méthodes analytiques pour la détermination d'un arc du méridien* (1799); *Tables du soleil (publiées par le bureau des longitudes)* (1806); *Rapport historique sur les progrès des sciences mathématiques depuis l'an 1789* (1810); *Abrégé d'astronomie* (1813); *Astronomie théorique et pratique* (1814); &c. 943

See J. B. J. Fourier's "Éloge" in *Mémoires de l'acad. des sciences*, t. iv.; Ch. Dupin, *Revue encyclopédique*, t. xvi. (1822); *Biog. universelle*, t. lxii. (C. L. Mathieu); Max. Marie, *Hist. des sciences*, x. 31; R. Grant, *Hist. of Physical Astr.* pp. 96, 142, 165; R. Wolf, *Geschichte der Astronomie*, p. 779, &c.

(A. M. C.)

DELAMERE (or De la Mer), **GEORGE BOOTH,** 1st Baron (1622-1684), son of William Booth, a member of an ancient family settled at Dunham Massey in Cheshire, and of Vere, daughter and co-heir of Sir Thomas Egerton, was born in August 1622. He took an active part in the Civil War with his grandfather, Sir George Booth, on the parliamentary side. He was returned for Cheshire to the Long Parliament in 1645 and to Cromwell's parliaments of 1654 and 1656. In 1655 he was appointed military commissioner for Cheshire and treasurer at war. He was one of the excluded members who tried and failed to regain their seats after the fall of Richard Cromwell in 1659. He had for some time been regarded by the royalists as a well-wisher to their cause, and was described to the king in May 1659 as "very considerable in his country, a presbyterian in opinion, yet so moral a man.... I think your Majesty may safely [rely] on him and his promises which are considerable and hearty."[1] He now became one of the chief leaders of the new "royalists" who at this time united with the cavaliers to effect the restoration. A rising was arranged for the 5th of August in several districts, and Booth took charge of operations in Cheshire, Lancashire and North Wales. He got possession of Chester on the 19th, issued a proclamation declaring that arms had been taken up "in vindication of the freedom of parliament, of the known laws, liberty and property," and marched towards York. The plot, however, was known to Thurloe. It had entirely failed in other parts of the country, and Lambert advancing with his forces defeated Booth's men at Nantwich Bridge. Booth himself escaped disguised as a woman, but was discovered at Newport Pagnell on the 23rd in the act of shaving, and was imprisoned in the Tower. He was, however, soon liberated, took his seat in the parliament of 1659-1660, and was one of the twelve members deputed to carry the message of the Commons to Charles II. at the Hague. In July 1660 he received a grant of £10,000, having refused the larger sum of £20,000 at first offered to him, and on the 20th of April 1661, on the occasion of the coronation, he was created Baron Delamere, with a licence to create six new knights. The same year he was appointed *custos rotulorum* of Cheshire. In later years he showed himself strongly antagonistic to the reactionary policy of the government. He died on the 8th of August 1684, and was buried at Bowdon. He married (1) Lady Catherine Clinton, daughter and co-heir of Theophilus, 4th earl of Lincoln, by whom he had one daughter; and (2) Lady Elizabeth Grey, daughter of Henry, 1st earl of Stamford, by whom, besides five daughters, he had seven sons, the second of whom, Henry, succeeded him in the title and estates and was created earl of Warrington. The earldom became extinct on the death of the latter's son, the 2nd earl, without male issue, in 1758, and the barony of Delamere terminated in the person of the 4th baron in 1770; the title was revived in 1821 in the Cholmondeley family.

1 Clarendon, *State Papers*, iii. 472.

DE LAND, a town and the county-seat of Volusia county, Florida, U.S.A., 111 m. by rail S. of Jacksonville, 20 m. from the Atlantic coast and 4 m. from the St John's river. Pop. (1900) 1449; (1910) 2812. De Land is served by the Atlantic Coast Line and by steamboats on the St John's river. It has a fine winter climate, with an average temperature of 60° F., has sulphur springs, and is a health and winter resort. There is a starch factory here; and the surrounding country is devoted to fruit-growing. De Land is the seat of the John B. Stetson University (co-educational), an undenominational institution under Baptist control, founded in 1884, as an academy, by Henry A. De Land, a manufacturer of Fairport, New York, and in 1887 incorporated under the name of De Land University, which was changed in 1889 to the present name, in honour of John Batterson Stetson (1830-1906), a Philadelphia manufacturer of hats, who during his life gave nearly $500,000 to the institution. The university includes a college of liberal arts, a department of law, a school of technology, an academy, a normal school, a model school, a business college and a school of music. De Land was founded in 1876 by H. A. De Land, above mentioned, who built a public school here in 1877 and a high school in 1883.

DELANE, JOHN THADEUS (1817-1879), editor of *The Times* (London), was born on the 11th of October 1817 in London. He was the second son of Mr W. F. A. Delane, a barrister, of an old Irish family, who about 1832 was appointed by Mr Walter financial manager of *The Times*. While still a boy he attracted Mr Walter's attention, and it was always intended that he should find work on the paper. He received a good general education at private schools and King's College, London, and also at Magdalen Hall, Oxford; after taking his degree in 1840 he at once began work on the paper, though later he read for the bar, being called in 1847. In 1841 he succeeded Thomas Barnes as editor, a post which he occupied for thirty-six years. He from the first obtained the best introductions into society and the chief political circles, and had a position there such as no journalist had previously enjoyed, using his opportunities with a sure intuition for the way in which events would move. His staff included some of the most brilliant men of the day, who worked together with a common ideal. The result to the paper, which in those days had hardly any real competitor in English journalism, was an excellence of information which gave it great power. (See NEWSPAPERS.) Delane was a man of many interests and great judgment; capable of long application and concentrated attention, with power to seize always on the main point at issue, and rapidly master the essential facts in the most complicated affair. His general policy was to keep the paper a national organ of opinion above party, but with a tendency to sympathize with the Liberal movements of the day. He admired Palmerston and respected Lord Aberdeen, and was of considerable use to both; and it was Lord Aberdeen himself who, in 1845, told him of the impending repeal of the Corn Laws, an incident round which many incorrect stories have gathered. The history, however, of the events during the thirteen administrations, between 1841 and 1877, in which *The Times*, and therefore Delane, played an important part cannot here be recapitulated. In 1877 his health gave way, and he retired from the editorship; and on the 22nd of November 1879 he died at Ascot.

A biography by his nephew, Arthur Irwin Dasent, was published in 1908.

DELANY, MARY GRANVILLE (1700-1788), an Englishwoman of literary tastes, was born at Coulston, Wilts, on the 14th of May 1700. She was a niece of the 1st Lord Lansdowne. In 1717 or 1718 she was unhappily married to Alexander Pendarves, a rich old Cornish landowner, who died in 1724. During a visit to Ireland she met Dean Swift and his intimate friend, the Irish divine, Patrick Delany, whose second wife she became in 1743. After his death in 1768 she passed all her summers with her bosom friend the dowager duchess of Portland—Prior's "Peggy"—and when the latter died George III. and Queen Charlotte, whose affection for their "dearest Mrs Delany" seems to have been most genuine, gave her a small house at Windsor and a pension of £300 a year. Fanny Burney (Madame D'Arblay) was introduced to her in 1783, and frequently visited her at her London home and at Windsor, and owed to her friendship her court appointment. At this time Mrs Delany was a charming and sweet old lady, with a reputation for cutting out and making the ingenious "paper mosaiks" now in the British Museum; she had known every one worth knowing in her day, had corresponded with Swift and Young, and left an interesting picture of the polite but commonplace English society of the 18th century in her six volumes of *Autobiography and Letters*. Burke calls her "a real fine lady"—"the model of an accomplished woman of former times." She died on the 15th of April 1788.

DE LA REY, JACOBUS HERCULES (1847-), Boer soldier, was born in the Lichtenburg district, and in his youth and early manhood saw much service in savage warfare. In 1893 he entered the Volksraad of the South African Republic, and was an active supporter of the policy of General Joubert. At the outbreak of the war with Great Britain in 1899 De La Rey was made a general, and he was engaged in the western campaign against Lord Methuen and Lord Roberts. He won his first great success at Nitral's Nek on the 11th of July 1900, where he compelled the surrender of a strong English detachment. In the second or guerrilla stage of the war De La Rey became one of the most conspicuously successful of the Boer leaders. He was assistant to General Louis Botha and a member of the government, with charge of operations in the western Transvaal. The principal actions in which he was successful (see also TRANSVAAL: *History*) were Nooitgedacht, Vlakfontein and the defeat and capture of Lord Methuen at Klerksdorp (March 7, 1902). The British general was severely wounded in the action, and De La Rey released him at once, being unable to afford him proper medical assistance. This humanity and courtesy marked De La Rey's conduct throughout the war, and even more than his military skill and daring earned for him the esteem of his enemies. After the conclusion of peace De La Rey, who had borne a prominent part in the negotiations, visited Europe with the other generals, with the intention of raising funds to enable the Boers to resettle their country. In December 1903 he went on a mission to India, and induced the whole of the Boer prisoners of war detained at Ahmednagar to accept the new order of things and to take the oath of allegiance. In February 1907 General De La Rey was returned unopposed as member for Ventersdorp in the legislative assembly of the first Transvaal parliament under self-government.

DE LA RIVE, AUGUSTE ARTHUR (1801-1873), Swiss physicist, was born at Geneva on the 9th of October 1801. He was the son of Charles Gaspard de la Rive (1770-1834), who studied medicine at Edinburgh, and after practising for a few years in London, became professor of pharmaceutical chemistry at the academy of Geneva in 1802 and rector in 1823. After a brilliant career as a student, he was appointed at the age of twenty-two to the chair of natural philosophy in the academy of Geneva. For some years after his appointment he devoted himself specially, with François Marcet (1803-1883), to the investigation of the specific heat of gases, and to observations for determining the temperature of the earth's crust. Electrical studies, however, engaged most of his attention, especially in connexion with the theory of the voltaic cell and the electric discharge in rarefied gases. His researches on the last-mentioned subject led him to form a new theory of the aurora borealis. In 1840 he described a process for the electro-gilding of silver and brass, for which in the following year he received a prize of 3000 francs from the French Academy of Sciences. Between 1854 and 1858 he published a *Traité de l'électricité théorique et appliquée*, which was translated into several languages. De la Rive's birth and fortune gave him considerable social and political influence. He was distinguished for his hospitality to literary and scientific men, and for his interest in the welfare and independence of his native country. In 1860, when the annexation of Savoy and Nice had led the Genevese to fear French aggression, de la Rive was sent by his fellow-citizens on a special embassy to England, and succeeded in securing a declaration from the English government, which was communicated privately to that of France, that any attack upon Geneva would be regarded as a *casus belli*. On the occasion of this visit the university of Oxford conferred upon de la Rive the honorary degree of D.C.L. When on his way to pass the winter at Cannes he died suddenly at Marseilles on the 27th of November 1873.

His son, Lucien de la Rive, born at Geneva on the 3rd of April 1834, published papers on various mathematical and physical subjects, and with Édouard Sarasin carried out investigations on the propagation of electric waves.

DELAROCHE, HIPPOLYTE, commonly known as Paul (1797-1856), French painter, was born in Paris on the 17th of July 1797. His father was an expert who had made a fortune, to some extent, by negotiating and cataloguing, buying and selling. He was proud of his son's talent, and able to forward his artistic education. The master selected was Gros, then painting life-size histories, and surrounded by many pupils. In no haste to make an appearance in the Salon, his first exhibited picture was a large one, "Josabeth saving Joas" (1822). This picture led to his acquaintance with Géricault and Delacroix, with whom he remained on the most friendly terms, the three forming the central group of a numerous body of historical painters, such as perhaps never before lived in one locality and at one time.

From 1822 the record of his life is to be found in the successive works coming from his hand. He visited Italy in 1838 and 1843, when his father-in-law, Horace Vernet, was director of the French Academy. His studio in Paris was in the rue Mazarine, where he never spent a day without some good result, his hand being sure and his knowledge great. His subjects, definitely expressed and popular in their manner of treatment, illustrating certain views of history dear to partisans, yet romantic in their general interest, were painted with a firm, solid, smooth surface, which gave an appearance of the highest finish. This solidity, found also on the canvas of Vernet, Scheffer, Leopold Robert and Ingres, was the manner of the day. It repudiates the technical charm of texture and variety of handling which the English school inherited as a tradition from the time of Reynolds; but it is more easily understood by the world at large, since a picture so executed depends for its interest rather on the history, scene in nature or object depicted, than on the executive skill, which may or may not be critically appreciated. We may add that his point of view of the historical characters which he treated is not always just. "Cromwell lifting the Coffin-lid and looking at the Body of Charles" is an incident only to be excused by an improbable tradition; but "The King in the Guard-Room," with villainous roundhead soldiers blowing tobacco smoke in his patient face, is a libel on the Puritans; and "Queen Elizabeth dying on the Ground," like a she-dragon no one dares to touch, is sensational; while the "Execution of Lady Jane Grey" is represented as taking place in a dungeon. Nothing can be more incorrect than this last as a reading of English history, yet we forget the inaccuracy in admiration of the treatment which represents Lady Jane, with bandaged sight, feeling for the block, her maids covering their faces, and none with their eyes visible among the many figures. On the other hand, "Strafford led to Execution," when Laud stretches his lawn-covered arms out of the small high window of his cell to give him a blessing as he passes along the corridor, is perfect; and the splendid scene of Richelieu in his gorgeous barge, preceding the boat containing Cinq-Mars and De Thou carried to execution by their guards, is perhaps the most dramatic semi-historical work ever done. "The Princes in the Tower" must also be mentioned as a very complete creation; and the "Young female Martyr floating dead on the Tiber" is so pathetic that criticism feels hard-hearted and ashamed before it. As a realization of a page of authentic history, again, no picture can surpass the "Assassination of the duc de Guise at Blois." The expression of the murdered man stretched out by the side of the bed, the conspirators all massed together towards the door and far from the body, show exact study as well as insight into human nature. This work was exhibited in his meridian time, 1835; and in the same year he exhibited the "Head of an Angel," a study from Horace Vernet's young daughter Louise, his love for whom was the absorbing passion of his life, and from the shock of whose death, in 1845, it is said he never quite recovered. By far his finest productions after her death are of the most serious character, a sequence of small elaborate pictures of incidents in the Passion. Two of these, the Virgin and the other Maries, with the apostles Peter and John, within a nearly dark apartment, hearing the crowd as it passes haling Christ to Calvary, and St John conducting the Virgin home again after all is over, are beyond all praise as exhibiting the divine story from a simply human point of view. They are pure and elevated, and also dramatic and painful. Delaroche was not troubled by ideals, and had no affectation of them. His sound but hard execution allowed no mystery to intervene between him and his *motif*, which was always intelligible to the million, so that he escaped all the waste of energy that painters who try to be poets on canvas suffer. Thus it is that

essentially the same treatment was applied by him to the characters of distant historical times, the founders of the Christian religion, and the real people of his own day, such as “Napoleon at Fontainebleau,” or “Napoleon at St Helena,” or “Marie Antoinette leaving the Convention” after her sentence.

In 1837 Delaroche received the commission for the great picture, 27 mètres long, in the hemicycle of the lecture theatre of the École des Beaux Arts. This represents the great artists of the modern ages assembled in groups on either hand of a central elevation of white marble steps, on the topmost of which are three thrones filled by the architects and sculptors of the Parthenon. To supply the female element in this vast composition he introduced the genii or muses, who symbolize or reign over the arts, leaning against the balustrade of the steps, beautiful and queenly figures with a certain antique perfection of form, but not informed by any wonderful or profound expression. The portrait figures are nearly all unexceptionable and admirable. This great and successful work is on the wall itself, an inner wall however, and is executed in oil. It was finished in 1841, and considerably injured by a fire which occurred in 1855, which injury he immediately set himself to remedy (finished by Robert-Fleury); but he died before he had well begun, on the 4th of November 1856.

Personally Delaroche exercised even a greater influence than by his works. Though short and not powerfully made, he impressed every one as rather tall than otherwise; his physiognomy was accentuated and firm, and his fine forehead gave him the air of a minister of state.

See Rees, *Delaroche* (London, 1880).

(W. B. Sc.)

DELARUE, GERVAIS (1751-1835), French historical investigator, formerly regarded as one of the chief authorities on Norman and Anglo-Norman literature, was a native of Caen. He received his education at the university of that town, and was ultimately raised to the rank of professor. His first historical enterprise was interrupted by the French Revolution, which forced him to take refuge in England, where he took the opportunity of examining a vast mass of original documents in the Tower and elsewhere, and received much encouragement, from Sir Walter Scott among others. From England he passed over to Holland, still in prosecution of his favourite task; and there he remained till in 1798 he returned to France. The rest of his life was spent in his native town, where he was chosen principal of his university. While in England he had been elected a member of the Royal Society of Antiquaries; and in his own country he was made a corresponding member of the Institute, and was enrolled in the Legion of Honour. Besides numerous articles in the *Memoirs of the Royal Society of London*, the *Mémoires de l’Institut*, the *Mémoires de la Société d’Agriculture de Caen*, and in other periodical collections, he published separately *Essais historiques sur les Bardes, les Jongleurs, et les Trouvères normands et anglo-normands* (3 vols., 1834), and *Recherches historiques sur la Prairie de Caen* (1837); and after his death appeared *Mémoires historiques sur le palinod de Caen* (1841), *Recherches sur la tapisserie de Bayeux* (1841), and *Nouveaux Essais historiques sur la ville de Caen* (1842). In all his writings he displays a strong partiality for everything Norman, and rates the Norman influence on French and English literature as of the very highest moment.

DE LA RUE, WARREN (1815-1889), British astronomer and chemist, son of Thomas De la Rue, the founder of the large firm of stationers of that name in London, was born in Guernsey on the 18th of January 1815. Having completed his education in Paris, he entered his father’s business, but devoted his leisure hours to chemical and electrical researches, and between 1836 and 1848 published several papers on these subjects. Attracted to astronomy by the influence of James Nasmyth, he constructed in 1850 a 13-in. reflecting telescope, mounted first at Canonbury, later at Cranford, Middlesex, and with its aid executed many drawings of the celestial bodies of singular beauty and fidelity. His chief title to fame, however, is his pioneering work in the application of the art of photography to astronomical research. In 1851 his attention was drawn to a daguerreotype of the moon by G. P. Bond, shown at the great exhibition of that year. Excited to emulation and employing the more rapid wet-collodion process, he succeeded before long in obtaining exquisitely defined lunar pictures, which remained unsurpassed until the appearance of the Rutherfurd photographs in 1865. In 1854 he turned his attention to solar physics, and for the purpose of obtaining a daily photographic representation of the state of the solar surface he devised the photo-heliograph, described in his report to the British Association, “On Celestial Photography in England” (1859), and in his Bakerian Lecture (*Phil. Trans.* vol. clii. pp. 333-416). Regular work with this instrument, inaugurated at Kew by De la Rue in 1858, was carried on there for fourteen years; and was continued at the Royal Observatory, Greenwich, from 1873 to 1882. The results obtained in the years 1862-1866 were discussed in two memoirs, entitled “Researches on Solar Physics,” published by De la Rue, in conjunction with Professor Balfour Stewart and Mr B. Loewy, in the *Phil. Trans.* (vol. clix. pp. 1-110, and vol. clx. pp. 389-496). In 1860 De la Rue took the photo-heliograph to Spain for the purpose of photographing the total solar eclipse which occurred on the 18th of July of that year. This expedition formed the subject of the Bakerian Lecture already referred to. The photographs obtained on that occasion proved beyond doubt the solar character of the prominences or red flames, seen around the limb of the moon during a solar eclipse. In 1873 De la Rue gave up active work in astronomy, and presented most of his astronomical instruments to the university observatory, Oxford. Subsequently, in the year 1887, he provided the same observatory with a 13-in. refractor to enable it to take part in the International Photographic Survey of the Heavens. With Dr Hugo Müller as his collaborator he published several papers of a chemical character between the years 1856 and 1862, and investigated, 1868-

1883, the discharge of electricity through gases by means of a battery of 14,600 chloride of silver cells. He was twice president of the Chemical Society, and also of the Royal Astronomical Society (1864-1866). In 1862 he received the gold medal of the latter society, and in 1864 a Royal medal from the Royal Society, for his observations on the total eclipse of the sun in 1860, and for his improvements in astronomical photography. He died in London on the 19th of April 1889.

See *Monthly Notices Roy. Astr. Soc.* l. 155; *Journ. Chem. Soc.* lvii. 441; *Nature*, xl. 26; *The Times* (April 22, 1889); Royal Society, *Catalogue of Scientific Papers*.

DELATOR, in Roman history, properly one who gave notice (*deferre*) to the treasury officials of moneys that had become due to the imperial fisc. This special meaning was extended to those who lodged information as to punishable offences, and further, to those who brought a public accusation (whether true or not) against any person (especially with the object of getting money). Although the word *delator* itself, for "common informer," is confined to imperial times, the right of public accusation had long been in existence. When exercised from patriotic and disinterested motives, its effects were beneficial; but the moment the principle of reward was introduced, this was no longer the case. Sometimes the accuser was rewarded with the rights of citizenship, a place in the senate, or a share of the property of the accused. At the end of the republican period, Cicero (*De Officiis*, ii. 14) expresses his opinion that such accusations should be undertaken only in the interests of the state or for other urgent reasons. Under the empire the system degenerated into an abuse, which reached its height during the reign of Tiberius, although the delators continued to exercise their activity till the reign of Theodosius. They were drawn from all classes of society,—patricians, knights, 946
freedmen, slaves, philosophers, literary men, and, above all, lawyers. The objects of their attacks were the wealthy, all possible rivals of the emperor, and those whose conduct implied a reproach against the imperial mode of life. Special opportunities were afforded by the law of majestas, which (originally directed against attacks on the ruler by word or deed) came to include all kinds of accusations with which it really had nothing to do; indeed, according to Tacitus, a charge of treason was regularly added to all criminal charges. The chief motive for these accusations was no doubt the desire of amassing wealth,[1] since by the law of majestas one-fourth of the goods of the accused, even if he committed suicide in order to avoid confiscation (which was always carried out in the case of those condemned to capital punishment), was assured to the accuser (who was hence called *quadruplator*). Pliny and Martial mention instances of enormous fortunes amassed by those who carried on this hateful calling. But it was not without its dangers. If the delator lost his case or refused to carry it through, he was liable to the same penalties as the accused; he was exposed to the risk of vengeance at the hands of the proscribed in the event of their return, or of their relatives; while emperors like Tiberius would have no scruples about banishing or putting out of the way those of his creatures for whom he had no further use, and who might have proved dangerous to himself. Under the better emperors a reaction set in, and the severest penalties were inflicted upon the delators. Titus drove into exile or reduced to slavery those who had served Nero, after they had first been flogged in the amphitheatre. The abuse naturally reappeared under a man like Domitian; the delators, with whom Vespasian had not interfered, although he had abolished trials for majestas, were again banished by Trajan, and threatened with capital punishment in an edict of Constantine; but, as has been said, the evil, which was an almost necessary accompaniment of autocracy, lasted till the end of the 4th century.

See Mayor's note on Juvenal iv. 48 for ancient authorities; C. Merivale, *Hist. of the Romans under the Empire*, chap. 44; W. Rein, *Criminalrecht der Römer* (1842); T. Mommsen, *Römisches Strafrecht* (1899); Kleinfeller in Pauly-Wissowa's *Realencyclopädie*.

1 "Delatores, genus hominum publico exitio repertum ... per praemia eliciebantur" (Tacitus, *Annals*, iv. 30).

DELAUNAY, ELIE (1828-1891), French painter, was born at Nantes and studied under Flandrin and at the École des Beaux Arts. He worked in the classicist manner of Ingres until, after winning the Prix de Rome, he went to Italy in 1856, and abandoned the ideal of Raphaelesque perfection for the sincerity and severity of the quattrocentists. As a pure and firm draughtsman he stands second only to Ingres. After his return from Rome he was entrusted with many important commissions for decorative paintings, such as the frescoes in the church of St Nicholas at Nantes; the three panels of "Apollo," "Orpheus" and "Amphion" at the Paris opera-house; and twelve paintings for the great hall of the council of state in the Palais Royal. His "Scenes from the Life of St Geneviève," which he designed for the Pantheon, remained unfinished at his death. The Luxembourg Museum has his famous "Plague in Rome" and a nude figure of "Diana"; and the Nantes Museum, the "Lesson on the Flute." In the last decade of his life he achieved great popularity as a portrait painter.

DELAUNAY, LOUIS ARSÈNE (1826-1903), French actor, was born in Paris, the son of a wine-seller. He studied at the Conservatoire, and made his first formal appearance on the stage in 1845, in *Tartuffe* at the

Odéon. After three years at this house he made his début at the Comédie Française as Dorante in Corneille's *Le Menteur*, and began a long and brilliant career in young lover parts. He continued to act as *jeune premier* until he was sixty, his grace, marvellous diction and passion enchanting his audiences. It was especially in the plays of Alfred de Musset that his gifts found their happiest expression. In the thirty-seven years during which he was a member of the Comédie Française, Delaunay took or created nearly two hundred parts. He retired in 1887, having been made a chevalier of the Legion of Honour in 1883.

DELAVIGNE, JEAN FRANÇOIS CASIMIR (1793-1843), French poet and dramatist, was born on the 4th of April 1793 at Havre. His father sent him at an early age to Paris, there to be educated at the Lycée Napoléon. Constitutionally of an ardent and sympathetic temperament, he enlarged his outlook by extensive miscellaneous reading. On the 20th of March 1811 the empress Marie Louise gave birth to a son, named in his very cradle king of Rome. This event was celebrated by Delavigne in a *Dithyrambe sur la naissance du roi de Rome*, which secured for him a sinecure in the revenue office.

About this time he competed twice for an academy prize, but without success. Delavigne, inspired by the catastrophe of 1815, wrote two impassioned poems, the first entitled Waterloo, the second, *Dévastation du musée*, both written in the heat of patriotic enthusiasm, and teeming with popular political allusions. A third, but of inferior merit, *Sur le besoin de s'unir après le départ des étrangers*, was afterwards added. These stirring pieces, termed by him *Messéniennes*, sounded a keynote which found an echo in the hearts of all. Twenty-five thousand copies were sold; Delavigne was famous. He was appointed to an honorary librarianship, with no duties to discharge. In 1819 his play *Les vêpres Siciliennes* was performed at the Odéon, then just rebuilt; it had previously been refused for the Théâtre Français. On the night of the first representation, which was warmly received, Picard, the manager, threw himself into the arms of his elated friend, exclaiming, "You have saved us! You are the founder of the second French Theatre." This success was followed up by the production of the *Comédiens* (1820), a poor play, with little plot, and the *Paria* (1821), with still less, but containing some well-written choruses. The latter piece obtained a longer lease of life than its intrinsic literary merits warranted, on account of the popularity of the political opinions freely expressed in it—so freely expressed, indeed, that the displeasure of the king was incurred, and Delavigne lost his post. But Louis Philippe, duke of Orleans, willing to gain the people's good wishes by complimenting their favourite, wrote to him as follows: "The thunder has descended on your house; I offer you an apartment in mine." Accordingly Delavigne became librarian at the Palais Royal, a position retained during the remainder of his life. It was here that he wrote the *École des vieillards* (1823), his best comedy, which gained his election to the Academy in 1825. To this period also belong *La Princesse Aurélie* (1828), and *Marino Faliero* (1829), a drama in the romantic style.

For his success as a writer Delavigne was in no small measure indebted to the stirring nature of the times in which he lived. The *Messéniennes*, which first introduced him to universal notice, had their origin in the excitement consequent on the occupation of France by the allies in 1815. Another crisis in his life and in the history of his country, the revolution of 1830, stimulated him to the production of a second masterpiece, *La Parisienne*. This song, set to music by Auber, was on the lips of every Frenchman, and rivalled in popularity the *Marseillaise*. A companion piece, *La Varsovienne*, was written for the Poles, by whom it was sung on the march to battle. Other works of Delavigne followed each other in rapid succession—*Louis XI* (1832), *Les Enfants d'Édouard* (1833), *Don Juan d'Autriche* (1835), *Une Famille au temps du Luther* (1836), *La Popularité* (1838), *La Fille du Cid* (1839), *Le Conseiller rapporteur* (1840), and *Charles VI* (1843), an opera partly written by his brother. In 1843 he quitted Paris to seek in Italy the health his labours had cost him. At Lyons his strength altogether gave way, and he died on the 11th of December.

By many of his own time Delavigne was looked upon as unsurpassed and unsurpassable. Every one bought and read his works. But the applause of the moment was gained at the sacrifice of lasting fame. As a writer he had many excellences. He expressed himself in a terse and vigorous style. The poet of reason rather than of imagination, he recognized his own province, and was rarely tempted to flights of fancy beyond his powers. He wrote always as he would have spoken, from sincere conviction. In private life he was in every way estimable,—upright, amiable, devoid of all jealousy, and generous to a fault.

His *Poésies* and his *Théâtre* were published in 1863. His *Œuvres complètes* (new edition, 1855) contains a biographical notice by his brother, Germain Delavigne, who is best known as a librettist in opera. See also Sainte-Beuve, *Portraits littéraires*, vol. v.; A. Favrot, *Étude sur Casimir Delavigne* (1894); and F. Vuacheux, *Casimir Delavigne* (1893).

DELAWARE, a South Atlantic state of the United States of America, one of the thirteen original states, situated between 38° 27′ and 39° 50′ N. lat. and between 75° 2′ and 75° 47′ W. long. (For map see Maryland.) It is bounded N. and N.W. by Pennsylvania, E. by the Delaware river and Delaware Bay, which separate it from New Jersey, and by the Atlantic Ocean; S. and W. by Maryland. With the exception of Rhode Island it is the smallest state in the Union, its area being 2370 sq. m., of which 405 sq. m. are water surface.

Physical Features.—Delaware lies on the Atlantic coastal plain, and is for the most part level and relatively low, its average elevation above the sea being about 50 ft. It is situated in the eastern part of the peninsula formed by Chesapeake Bay and the estuary of the Delaware river. In the extreme N. the country is rolling,

with moderately high hills, moderately deep valleys and rapid streams. West of Wilmington there rises a ridge which crosses the state in a north-westerly direction and forms a watershed between Christiana and Brandywine creeks, its highest elevation above sea-level being 280 ft. South of the Christiana there begins another elevation, sandy and marshy, which extends almost the entire length of the state from N.W. to S.E., and forms a second water-parting. The streams that drain the state are small and insignificant. Those of the N. flow into Brandywine and Christiana creeks, whose estuary into Delaware river forms Wilmington harbour; those of the S.W. have a common outlet in the Nanticoke river of Maryland; those of the E. empty into Delaware Bay and the Atlantic Ocean. The principal harbours are those of Wilmington, New Castle and Lewes. The shore of the bay is marshy, that of the Atlantic is sandy. In Kent county there are more than 60,000 acres of tidal marshland, some of which has been reclaimed by means of dykes; Cypress Swamp in the extreme S. has an area of 50,000 acres. The soils of the N. are clays, sometimes mixed with loam; those of the central part are mainly loams; while those of the S. are sands.

Minerals are found only in the N. part of the state. Those of economic value are kaolin, mined chiefly in the vicinity of Hockessin, New Castle county, the static kaolin product being exceeded in 1903 only by that of Pennsylvania among the states of the United States; granite, used for road-making and rough construction work, found near Wilmington; and brick and tile clays; but the value of their total product in 1902 was less than $500,000. In 1906 the total mineral product was valued at $814,126, of which $237,768 represented clay products and $146,346 stone. In 1902 only 2.2% of the wage-earners were engaged in mining.

The forests, which once afforded excellent timber, including white oak for shipbuilding, have been greatly reduced by constant cutting; in 1900 it was estimated that 700 sq. m. were wooded, but practically none of this stand was of commercial importance. The fisheries, chiefly oyster, sturgeon and shad, yield an annual product valued at about $250,000.

The proximity of the Delaware and Chesapeake bays help to give Delaware a mild and temperate climate. The mean annual temperature is approximately 55° F., ranging from 52° in the S. to 56° in the N., and the extremes of heat and cold are 103° in the summer and -17° in the winter. The annual rainfall, greater on the coast than inland, ranges from 40 to 45 in.

Industry and Trade.—Delaware is pre-eminently an agricultural state. In 1900 85% of its total land surface was enclosed in farms—a slight decline since 1880. Seven-tenths of this was improved land, and the expenditure per farm for fertilizers, greater in 1890 than the average of the Atlantic states, approximated $55 per farm in 1900. In 1899 Delaware spent more per acre for fertilizers than any of the other states except New Jersey, Rhode Island and Maryland. The average size of farms, as in the other states, has declined, falling from 124.6 acres in 1880 to 110.1 acres in 1900. A large proportion of farms (49.7%) were operated by the owners, and the prevailing form of tenantry was the share system by which 42.5% of the farms were cultivated, while 8.24% of the farms were operated by negroes; these represented less than 4% of the total value of farm property, the average value of farms operated by negroes being $17 per acre, that of farms operated by whites, $23 per acre. The total value of farm products in 1900 was $9,190,777, an increase of 30% over that of 1890, while the cultivation of cereals suffered on account of the competition of the western states. Indian corn and wheat form the two largest crops, their product in 1900 being respectively 24% and 52% greater than in 1890; but these crops when compared with those of other states are relatively unimportant. In 1906 the acreage of Indian corn was 196,472 acres with a yield of 5,894,160 bushels valued at $2,475,547, and the acreage of wheat was 121,745 acres with a yield of 1,947,920 bushels valued at $1,383,023. The value of the fruit crop, for which Delaware has long been noted, also increased during the same decade, but disease and frost caused a marked decline in the production of peaches, a loss balanced by an increased production of apples, pears and other orchard fruits. Large quantities of small fruits, particularly of strawberries, raspberries and blackberries, are produced, the southern portion of Sussex county being particularly favourable for strawberry culture. The vicissitudes of fruit raising have also caused increasing attention to be paid to market gardening, dairying and stock raising, particularly to market gardening, an industry which is favoured by the proximity of large cities. The same influence also explains, partly at least, the decrease (of 13%) in the value of farm property between 1890 and 1900.

The development of manufacturing in Delaware has not been so extensive as its favourable situation relative to the other states, the facilities for water and railway transportation, and the proximity of the coal and iron fields of Pennsylvania, would seem to warrant. In 1905 the wage-earners engaged in manufacturing (under the factory system) numbered 18,475, and the total capital invested in manufacturing was $50,925,630; the gross value of products was $41,160,276; the net value (deducting the value of material purchased in partly manufactured form) was $16,276,470. The principal industry was the manufacture of iron and steel products, which, including steel and rolling mills, car, foundry and machine shops, and shipyards, represented more than 30% of the total capital, and approximately 25% of the total gross product of the manufactures in the state. The tanning, currying and finishing of leather ranks second in importance, with a gross product ($10,250,842) 9% greater than that of 1900, and constituting about one-fourth of the gross factory product of the state in 1905; and the manufacture of food products ranked third, the value of the products of the fruit canning and preserving industry having more than doubled in the decade 1890-1900, but falling off a little more than 7% in 1900-1905. The manufacture of paper and wood pulp showed an increased product in 1905 19.1% greater than in 1900; and flour and grist mill products were valued in 1905 43.6% higher than in 1900. In the grand total of manufactured products, however, the state showed in 1905 a decrease of 4% from 1900. The great manufacturing centre is Wilmington, where in 1905 almost two-thirds of the capital was invested, and nearly three-fourths of the product was turned out. There is much manufacturing also at New Castle.

Delaware has good facilities for transportation. Its railway mileage in January 1907 was 333.6 m; the Philadelphia, Baltimore & Washington (Pennsylvania system), the Baltimore & Philadelphia (Baltimore & Ohio system), and the Wilmington & Northern (Philadelphia & Reading system) cross the northern part of the state, while the Delaware railway (leased by the Philadelphia, Baltimore & Washington) runs the length of the state below Wilmington, and another line, the Maryland, Delaware & Virginia (controlled by the Baltimore, Chesapeake & Atlantic railway, which is related to the Pennsylvania system), connects Lewes, Del., with Love

Point, Md., on the Chesapeake Bay. There is no state railway commission, and the farmers of southern Delaware have suffered from excessive freight rates. The Delaware & Chesapeake Canal (13½ m. long, 66 ft. wide and 10 ft. deep) crosses the N. part of the state, connecting Delaware river and Chesapeake Bay, and thus affords transportation by water from Baltimore to Philadelphia. The canal was completed in 1829; in 1907 a commission appointed by the president to report on a route for a waterway between Chesapeake and Delaware bays selected the route of this canal. The states of Maryland and Delaware aided in its construction, and in 1828 the national government also made an appropriation. Wilmington is a customs district in which New Castle and Lewes are included; but its trade is largely coastwise. Rehoboth and Indian River bays are navigable for vessels of less than 6 ft. draft. Opposite Lewes is the Delaware Breakwater (begun in 1818 and completed in 1869, at a cost of more than $2,000,000), which forms a harbour 16 ft. deep. In 1897-1901 the United States government constructed a harbour of refuge, formed by a second breakwater 2¼ m. N. of the existing one; its protected anchorage is 552 acres and the cost was more than $2,090,000. The harbour is about equidistant from New York, Philadelphia, and the capes of Chesapeake Bay, and is used chiefly by vessels awaiting orders to ports for discharge or landing. The national government also made appropriations for opening an inland waterway from Lewes to Chincoteague Bay, Virginia, for improving Wilmington harbour, and for making navigable several of the larger streams of the state.

Population.—The population in 1880 was 146,608; in 1890, 168,493, an increase of 14.9%; in 1900, 184,735, a further increase of 9.6%; in 1910, 202,322. The rate of increase before 1850 was considerably smaller than the rate after that date. Of the population in 1900, 92.5% was native born and 7.5% was foreign-born. The negro population was 30,697, or 16.6% of the total. In Indian River Hundred, Sussex county, there formerly lived a community of people,—many of whom are of the fair Caucasian type,—called “Indians” or “Moors”; they are now quite generally dispersed throughout the state, especially in Kent and Sussex counties. Their origin is unknown, but according to local tradition they are the descendants of some Moorish sailors who were cast ashore many years ago in a shipwreck; their own tradition is that they are descended from the children of an Irish mother and a negro father, these children having intermarried with Indians of the Nanticoke tribe. They have, where practicable, separate churches and schools, the latter receiving state aid. The urban population of Delaware (*i.e.* of Wilmington, the only city having more than 5000 inhabitants) was, in 1900, 41.4% of the state’s population. There were thirty-five incorporated cities and towns. The largest of these was the city of Wilmington, with 76,508 inhabitants. The city next in size, New Castle, had a population of 3380, while the largest town, Dover, the capital of the state, had 3329. The total number of communicants of all denominations in 1906 was 71,251,—32,402 Methodists, 24,228 Roman Catholics, 5200 Presbyterians, 3796 Protestant Episcopalians, and 2921 Baptists.

Government.—The constitution by which Delaware is governed was adopted in 1897. Like the previous constitutions of 1776, 1792 and 1831, it was promulgated by a constitutional convention without submission to the people for ratification, and amendments may be adopted by a two-thirds vote of each house in two consecutive legislatures. Its character is distinctly democratic. The property qualification of state senators and the restriction of suffrage to those who have paid county or poll taxes are abolished; but suffrage is limited to male adults who can read the state constitution in English, and can write their names, unless physically disqualified, and who have registered. In 1907 an amendment to the constitution was adopted, which struck out from the instrument the clause requiring the payment of a registration fee of one dollar by each elector. Important innovations in the constitution of 1897 are the office of lieutenant-governor, and the veto power of the governor which may extend to parts and clauses of appropriation bills, but a bill may be passed over his veto by a three-fifths vote of each house of the legislature, and a bill becomes a law if not returned to the legislature within ten days after its reception by the governor, unless the session of the legislature shall have expired in the meantime. The governor’s regular term in office is four years, and he is ineligible for a third term. All his appointments to offices where the salary is more than $500 must be confirmed by the senate; all pardons must be approved by a board of pardons. Representation in the legislature is according to districts, members of the lower house being chosen for two, and members of the upper house for four years. Members of the lower house must be at least twenty-four years of age, members of the senate at least twenty-seven; members of both houses must at the time of their election have been citizens of the state for at least three years. In November 1906 the people of the state voted (17,248 for; 2162 against) in favour of the provision of a system of advisory initiative and advisory referendum; and in March 1907 the general assembly passed an act providing initiative and referendum in the municipal affairs in the city of Wilmington. The organization of the judiciary is similar to that under the old English system. Six judges—a chancellor, a chief justice, and four associate justices—of whom there shall be at least one resident in each of the three counties, and not more than three shall belong to the same political party, are appointed by the governor, with the consent of the senate, for a term of twelve years. A certain number of them hold courts of chancery, general sessions, oyer and terminer, and an orphans’ court; the six together constitute the supreme court, but the judge from whose decision appeal is made may not hear the appealed case unless the appeal is made at his own instance. Bribery may be punished by fine, imprisonment and disfranchisement for ten years. Corporations cannot be created by a special act of the legislature, and no corporation may issue stock except for an equivalent value of money, labour or property. In order to attract capital to the state, the legislature has reduced the taxes on corporations, has forbidden the repeal of charters, and has given permission for the organization of corporations with both the power and name of trust companies. Legislative divorces are forbidden by the constitution, and a statute of 1901 subjects wife-beaters to corporal punishment. Although punishment by whipping and by standing in the pillory was prohibited by an act of Congress in 1839, in so far as the Federal government had jurisdiction, both these forms of punishment were retained in Delaware, and standing in the pillory was prescribed by statute as a punishment for a number of offences, including various kinds of larceny and forgery, highway robbery, and even pretending “to exercise the art of witchcraft, fortune-telling or dealing with spirits,” at least until 1893. In 1905, by a law approved on the 20th of March, the pillory was abolished. The whipping-post was in 1908 still maintained in Delaware, and whipping continued to be prescribed as a punishment for a variety of offences, although in 1889 a law was passed which prescribed that “hereafter no female convicted of any crime in this state shall be whipped or made to stand in the pillory,” and a law passed in 1883 prescribed that “in case of conviction of larceny, when the prisoner is of tender years, or is charged for the first time (being shown to have before had a good

character), the court may in its discretion omit from the sentence the infliction of lashes." An old law still on the statute-books when the edition of the revised statutes was issued in 1893, prescribes that "the punishment of whipping shall be inflicted publicly by strokes on the bare back, well laid on."

The unit of local government is the "hundred," which corresponds to the township of Pennsylvania. The employment of children under fourteen years of age in factories is forbidden by statute. Divorces are granted for adultery, desertion for three years, habitual drunkenness, impotence at the time of marriage, fraud, lack of marriageable age (eighteen for males, sixteen for females), and failure of husband to provide for his wife during three consecutive years. The marriages of whites with negroes and of insane persons are null; but the children of the married insane are legitimate.

In 1908 the state debt was $816,785, and the assets in bonds, railway mortgages and bank stocks exceeded the liabilities by $717,779. Besides the income from interest and dividends on investments, the state revenues are derived from taxes on licences, on commissions to public officers, on railway, telegraph and telephone, express, and banking companies, and to a slight extent from taxes on collateral inheritance.

Education.—The charitable and penal administration of Delaware is not well developed. There is a state hospital for the insane at Farnhurst. Other dependent citizens are cared for in the institutions of other states at public expense. In 1899 a county workhouse was established in New Castle county, in which persons under sentence must labour eight hours a day, pay being allowed for extra hours, and a diminution of sentence for good behaviour. At Wilmington is the Ferris industrial school for boys, a private reformatory institution to which New Castle county gives $146 for each boy; and the Delaware industrial school for girls, also at Wilmington, receives financial support from both county and state.

The educational system of the state has been considerably improved within recent years. The maintenance of a system of public schools is rendered compulsory by the state constitution, and a new compulsory school law came into effect in 1907. The first public school law, passed in 1829, was based largely on the principle of "local option," each school district being left free to determine the character of its own school or even to decide, if it wished, against having any school at all. The system thus established proved to be very unsatisfactory, and a new school law in 1875 brought about a greater degree of uniformity and centralization through its provisions for the appointment of a state superintendent of free schools and a state board of education. In 1888, however, the state superintendency was abolished, and county superintendencies were created instead, the legislature thus returning, in a measure, to the old system of local control. Centralization was again secured, in 1898, by the passage of a law reorganizing and increasing the powers of the state board of education. The state school fund, ranging from about $150,000 to $160,000 a year, is apportioned among the school districts, according to the number of teachers employed, and is used exclusively for teachers' salaries and the supplying of free text-books. This fund is supplemented by local taxation. No discrimination is allowed on account of race or colour; but separate schools are provided for white and coloured children. Delaware College (non-sectarian) at Newark, founded in 1833 as Newark College and rechartered, after suspension from 1859 to 1870, under the present name, as a state institution, derives most of its financial support from the United States Land Grant of 1862 and the supplementary appropriation of 1890, and is the seat of an agricultural experiment station, established in 1888 under the so-called "Hatch Bill" of 1887. In 1906-1907 Delaware College had 20 instructors and 130 students. The college is a part of the free school system of Delaware, and tuition is free to all students from the state. There is an agricultural college for negroes at Dover; this college receives one-fifth of the appropriation made by the so-called "new Morrill Bill" of 1890.

History.—Delaware river and bay were first explored on behalf of the Dutch by Henry Hudson in 1609, and more thoroughly in 1615-1616 by Cornelius Hendrikson, whose reports did much to cause the incorporation of the Dutch West India Company. The first settlement on Delaware soil was made under the auspices of members of this company in 1631 near the site of the present Lewes. The leaders, one of whom was Captain David P. de Vries, wished "to plant a colony for the cultivation of grain and tobacco as well as to carry on the whale fishery in that region." The settlement, however, was soon completely destroyed by the Indians. (See Lewes.) A more successful effort at colonization was made under the auspices of the South Company of Sweden, a corporation organized in 1624 as the "Australian Company," by William Usselinx, who had also been the chief organizer of the Dutch West India Company, and now secured a charter or *manifest* from Gustavus Adolphus. The privileges of the company were extended to Germans in 1633, and about 1640 the Dutch members were bought out. In 1638 Peter Minuit on behalf of this company established a settlement at what is now Wilmington, naming it, in honour of the infant queen Christina, Christinaham, and naming the entire territory, bought by Minuit from the Minquas Indians and extending indefinitely westward from the Delaware river between Bombay Hook and the mouth of the Schuylkill river, "New Sweden." This territory was subsequently considerably enlarged. In 1642 mature plans for colonization were adopted. A new company, officially known as the West India, American, or New Sweden Company, but like its predecessor popularly known as the South Company, was chartered, and a governor, Johan Printz (*c.* 1600-1663) was sent out by the crown. He arrived early in 1643 and subsequently established settlements on the island of Tinicum, near the present Chester, Pennsylvania, at the mouth of Salem Creek, New Jersey, and near the mouth of the Schuylkill river. Friction had soon arisen with New Netherland, although, owing to their common dislike of the English, the Swedes and the Dutch had maintained a formal friendship. In 1651, however, Peter Stuyvesant, governor of New Netherland, and more aggressive than his predecessors, built Fort Casimir, near what is now New Castle. In 1654 Printz's successor, Johan Claudius Rising, who had arrived from Sweden with a large number of colonists, expelled the Dutch from Fort Casimir. In retaliation, Stuyvesant, in 1655, with seven vessels and as many hundred men, recaptured the fort and also captured Fort Christina (Wilmington). New Sweden thus passed into the control of the Dutch, and became a dependency of New Netherland. In 1656, however, the Dutch West India Company sold part of what had been New Sweden to the city of Amsterdam, which in the following year established a settlement called "New Amstel" at Fort Casimir (New Castle). This settlement was badly administered and made little progress.

In 1663 the whole of the Delaware country came under the jurisdiction of the city of Amsterdam, but in the following year this territory, with New Netherland, was seized by the English. For a brief interval, in 1673-

1674, the Dutch were again in control, but in the latter year, by the treaty of Westminster, the "three counties on the Delaware" again became part of the English possessions in America held by the duke of York, later James II. His formal grant from Charles II. was not received until March 1683. In order that no other settlements should encroach upon his centre of government, New Castle, the northern boundary was determined by drawing an arc of a circle, 12 m. in radius, and with New Castle as the centre. This accounts for the present curved boundary line between Delaware and Pennsylvania. Previously, however, in August 1680, the duke of York had leased this territory for 10,000 years to William Penn, to whom he conveyed it by a deed of feoffment in August 1682; but differences in race and religion, economic rivalry between New Castle and the Pennsylvania towns, and petty political quarrels over representation and office holding, similar to those in the other American colonies, were so intense that Penn in 1691 appointed a special deputy governor for the "lower counties." Although reunited with the "province" of Pennsylvania in 1693, the so-called "territories" or "lower counties" secured a separate legislature in 1704, and a separate executive council in 1710; the governor of Pennsylvania, however, was the chief executive until 1776. A protracted boundary dispute with Maryland, which colony at first claimed the whole of Delaware under Lord Baltimore's charter, was not settled until 1767, when the present line separating Delaware and Maryland was adopted. In the War of Independence Delaware furnished only one regiment to the American army, but that was one of the best in the service. One of its companies carried a number of gamecocks said to have been the brood of a blue hen; hence the soldiers, and later the people of the state, have been popularly known as the "Blue Hen's Chickens."

In 1776 a state government was organized, representative of the Delaware state, the term "State of Delaware" being first adopted in the constitution of 1792. One of the peculiarities of the government was that in addition to the regular executive, legislative and judicial departments there was a privy council without whose approval the governor's power was little more than nominal. In 1786 Delaware was one of the five states whose delegates attended the Annapolis Convention (see Annapolis, Maryland), and it was the first (on the 7th of December 1787) to ratify the Federal constitution. From then until 1850 it was controlled by the Federalist or Whig parties. In 1850 the Democrats, who had before then elected a few governors and United States senators, secured control of the entire administration—a control unarrested, except in 1863, until the last decade of the 19th century. Although it was a slave state, the majority of the people of Delaware opposed secession in 1861, and the legislature promptly answered President Lincoln's call to arms; yet, while 14,000 of the 40,000 males between the ages of fourteen and sixty served in the Union army, there were many sympathizers with the Confederacy in the southern part of the state.

In 1866, 1867 and 1869, respectively, the legislature refused to ratify the thirteenth, fourteenth and fifteenth amendments to the Federal constitution. The provision of the state constitution that restricted suffrage to those who had paid county or poll taxes and made the tax lists the basis for the lists of qualified voters, opened the way for the disfranchisement of many negroes by fraudulent means. Consequently the levy court of New Castle county was indicted in the United States circuit court in 1872, and one of its members was convicted. Again in 1880 the circuit court, by virtue of the Federal statute of 1872 on elections, appointed supervisors of elections in Delaware. The negro vote has steadily increased in importance, and in 1900 was approximately one-fifth of the total vote of the state. In 1901 the legislature ratified the three amendments rejected in former years. Another political problem has been that of representation. According to the constitution of 1831 the unit of representation in the legislature was the county; inasmuch as the population of New Castle county has exceeded after 1870 that of both Kent and Sussex, the inequality became a cause of discontent. This is partly eradicated by the new constitution of 1897, which reapportioned representation according to electoral districts, so that New Castle has seven senators and fifteen representatives, while each of the other counties has seven senators and ten representatives.

In 1889 the Republicans for the first time since the Civil War secured a majority in the legislature, and elected Anthony J. Higgins to the United States Senate. In that year a capitalist and promoter, J. Edward Addicks (b. 1841, in Pennsylvania), became a citizen of the state, and after securing for himself the control of the Wilmington gas supply, systematically set about building up a personal "machine" that would secure his election to the national Senate as a Republican. His purpose was thwarted in 1893, when a Democratic majority chose, for a second term, George Gray (b. 1840), who from 1879 to 1885 had been the attorney-general of the state and subsequently was a member of the Spanish-American Peace Commission at Paris in 1898 and became a judge of the United States circuit court, third judicial circuit, in 1899. Mr Addicks was an avowed candidate in 1895, but the opposition of the Regular Republicans, who accused him of corruption and who held the balance of power, prevented an election. In 1897, the legislature being again Democratic, Richard R. Kenney (b. 1856) was chosen to fill the vacancy for the remainder of the unexpired term. Meanwhile the two Republican factions continued to oppose one another, and both sent delegates to the national party convention in 1896, the "regular" delegation being seated. The expiration of Senator Gray's term in 1899 left a vacancy, but although the Republicans again had a clear majority the resolution of the Regulars prevented the Union Republicans, as the supporters of Addicks called themselves, from seating their patron. Both the Regular and Union factions sent delegations to the national party convention in 1900, where the refusal of the Regulars to compromise led to the recognition of the Union delegates. Despite this apparent abandonment of their cause by the national organization, the Regulars continued their opposition, the state being wholly without representation in the Senate from the expiration of Senator Kenney's term in 1901 until 1903, when a compromise was effected whereby two Republicans, one of each faction, were chosen, one condition being that Addicks should not be the candidate of the Union Republicans. Both factions were recognized by the national convention of 1904, but the legislature of 1905 adjourned without being able to fill a vacancy in the Senate which had again occurred. The deadlock, however, was broken at the special session of the legislature called in 1906, and in June of that year Henry A. Du Pont was elected senator.

Governors of Delaware

I. *Swedish.*

Peter Minuit	1638-1640
Peter Hollander	1640-1643
Johan Printz	1643-1653
Johan Papegoga (acting)	1653-1654
Johan Claudius Rising	1654-1655

II. *Dutch.*

(Same as for New York.)

III. *English.*

(Same as New York until 1682.)
(Same as Pennsylvania 1682-1776.)

Presidents of Delaware

John McKinley	1776-1778
Caesar Rodney	1778-1781
John Dickinson	1781-1783
Nicholas Van Dyke	1783-1786
Thomas Collins	1786-1789

Governors

Joshua Clayton	1789-1796	Federalist
Gunning Bedford	1796-1797	”
Daniel Rogers[1]	1797-1799	”
Richard Bassett	1799-1801	”
James Sykes[2]	1801-1802	”
David Hall	1802-1805	Federalist
Nathaniel Mitchell	1805-1808	”
George Truett	1808-1811	”
Joseph Haslett	1811-1814	”
Daniel Rodney	1814-1817	”
John Clarke	1817-1820	”
Henry Malleston[3]	1820	”
Jacob Stout[4]	1820-1821	”
John Collins	1821-1822	Democratic-Republican
Caleb Rodney[5]	1822	”
Joseph Haslett	1822-1823	Democratic-Republican
Charles Thomas[6]	1823-1824	”
Samuel Paynter	1824-1827	Federalist
Charles Polk	1827-1830	”
David Hazzard	1830-1833	American-Republican
Caleb P. Bennett	1833-1836	Democrat
Charles Polk[7]	1836-1837	”
Cornelius P. Comegys	1837-1841	Whig
William B. Cooper	1841-1845	”
Thomas Stockton	1845-1846	”
Joseph Maul[8]	1846	”
William Temple[9]	1846-1847	”
William Tharp	1847-1851	Democrat
William H. Ross	1851-1855	”
Peter F. Causey	1855-1859	Whig-Know-Nothing
William Burton	1859-1863	Democrat
William Cannon	1863-1865	Republican
Gove Saulsbury[10]	1865-1871	Democrat
James Ponder	1871-1875	”
John P. Cockran	1875-1879	”
John W. Hall	1879-1883	”
Charles C. Stockley	1883-1887	”
Benjamin T. Biggs	1887-1891	”
Robert J. Reynolds	1891-1895	”
Joshua H. Marvil	1895	Republican
William T. Watson[11]	1895-1897	Democrat
Ebe W. Tunnell	1897-1901	”
John Hunn	1901-1905	Republican “
Preston Lea	1905-1909	”
Simeon S. Pennewill	1909	”

Bibliography.—Information about manufactures, mining and agriculture may be found in the reports of the *Twelfth Census of the United States*, especially *Bulletins 69* and *100*. The Agricultural Experiment Station, at Newark, publishes in its *Annual Report* a record of temperature and rainfall. For law and administration see *Constitution of Delaware* (Dover, 1899) and the *Revised Code* of 1852, amended 1893 (Wilmington, 1893). For education see L. B. Powell, *History of Education in Delaware* (Washington, 1893), and a sketch in the *Annual Report* for 1902 of the United States Commissioner of Education. The most elaborate history is that of John Thomas Scharf, *History of the State of Delaware* (2 vols., Philadelphia, 1888); the second volume is entirely biographical. Claes T. Odhner’s brief sketch, *Kolonien Nya Sveriges Grundläggning, 1637-1642* (Stockholm, 1876; English translation in the *Pennsylvania Magazine of History and Biography,* vol. iii.), and

Carl K. S. Sprinchorn's *Kolonien Nya Sveriges Historia* (1878; English translation in the *Pennsylvania Magazine of History and Biography*, vols. vii. and viii.) are based, in part, on documents in the Swedish Royal Archives and at the universities of Upsala and Lund, which were unknown to Benjamin Ferris (*History of the Original Settlements of the Delaware*, Wilmington, 1846) and Francis Vincent (*History of the State of Delaware*, Philadelphia, 1870), which ends with the English occupation in 1664. In vol. iv. of Justin Winsor's *Narrative and Critical History of America* (Boston, 1884) there is an excellent chapter by Gregory B. Keen on "New Sweden, or the Swedes on the Delaware," to which a bibliographical chapter is appended. The *Papers* of the Historical Society of Delaware (1879 seq.) contain valuable material. In part ii. of the *Report of the Superintendent of the U.S. Coast and Geodetic Survey* for 1893 (Washington, 1905) there is "A Historical Account of the Boundary Line between the States of Pennsylvania and Delaware, by W. C. Hodgkins." The colonial records are preserved with those of New York and Pennsylvania; only one volume of the State Records has been published, and *Minutes of the Council of Delaware State, 1776-1792* (Dover, 1886). For political conditions since the Civil War see vol. 141 of the *North American Review*, vol. 32 of the *Forum*, and vol. 73 of the *Outlook*—all published in New York.

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1 Speaker of the senate. Filled unexpired term of Gunning Bedford (d. 1797).

2 Speaker of senate. Filled unexpired term of Richard Bassett, who resigned 1801.

3 Died before he was inaugurated.

4 Speaker of the senate.

5 Speaker of the senate, John Collins dying in 1822.

6 Speaker of senate, Haslett dying in 1823.

7 Speaker of senate.

8 Speaker of senate, Stockton dying in 1846.

9 Speaker of senate, Maul dying in 1846.

10 As speaker of the senate filled the unexpired term of Cannon (d. 1865), and then became governor in 1867.

11 President of senate, Marvil dying in 1895.

DELAWARE, a city and the county-seat of Delaware county, Ohio, U.S.A., on the Olentangy (or Whetstone) river, near the centre of the state. Pop. (1890) 8224; (1900) 7940 (572 being foreign-born and 432 negroes); (1910) 9076. Delaware is served by the Pennsylvania, the Cleveland, Cincinnati, Chicago & St Louis (New York Central system), and the Hocking Valley railways, and by two interurban lines. The city is built on rolling ground about 900 ft. above sea-level. There are many sulphur and iron springs in the vicinity. Delaware is the seat of the Ohio Wesleyan University (co-educational), founded by the Ohio Conference of the Methodist Episcopal Church in 1841, and opened as a college in 1844; it includes a college of liberal arts (1844), an academic department (1841), a school of music (1877), a school of fine arts (1877), a school of oratory (1894), a business school (1895), and a college of medicine (the Cleveland College of Physicians and Surgeons, at Cleveland, Ohio; founded as the Charity Hospital Medical College in 1863, and the medical department of the university of Wooster until 1896, when, under its present name, it became a part of Ohio Wesleyan University). In 1877 the Ohio Wesleyan female college, established at Delaware in 1853, was incorporated in the university. In 1907-1908 the university had 122 instructors, 1178 students and a library of 55,395 volumes. At Delaware, also, are the state industrial school for girls, a Carnegie library, the Edwards Young Men's Christian Association building and a city hospital. The city has railway shops and foundries, and manufactures furniture, carriages, tile, cigars and gas engines. Delaware was laid out in 1808 and was first incorporated in 1815. It was the birthplace of Rutherford B. Hayes, president of the United States from 1877 to 1881.

DELAWARE INDIANS, the English name for the Leni Lenape, a tribe of North American Indians of Algonquian stock. When first discovered by the whites the tribe was settled on the banks of the Delaware river. The French called them Loups (wolves) from their chief totemic division. Early in the 17th century the Dutch began trading with them. Subsequently William Penn bought large tracts of land from them, and war followed, the Delawares alleging they had been defrauded; but, with the assistance of the Six Nations, the whites forced them back west of the Alleghenies. In 1789 they were placed on a reservation in Ohio and subsequently in 1818 were moved to Missouri. Various removals followed, until in 1866 they accepted lands in the Indian territory (Oklahoma) and gave up the tribal relation. They have remained there and now number some 1700.

DELAWARE RIVER, a stream of the Atlantic slope of the United States, meeting tide-water at Trenton,

New Jersey, 130 m. above its mouth. Its total length, from the head of the longest branch to the capes, is 410 m., and above the head of the bay its length is 360 m. It constitutes in part the boundary between Pennsylvania and New York, the boundary between New Jersey and Pennsylvania, and, for a few miles, the boundary between Delaware and New Jersey. The main, west or Mohawk branch rises in Schoharie county, N.Y., about 1886 ft. above the sea, and flows tortuously through the plateau in a deep trough until it emerges from the Catskills. Other branches rise in Greene and Delaware counties. In the upper portion of its course the varied scenery of its hilly and wooded banks is exquisitely beautiful. After leaving the mountains and plateau, the river flows down broad Appalachian valleys, skirts the Kittatinny range, which it crosses at Delaware Water-Gap, between nearly vertical walls of sandstone, and passes through a quiet and charming country of farm and forest, diversified with plateaus and escarpments, until it crosses the Appalachian plain and enters the hills again at Easton, Pa. From this point it is flanked at intervals by fine hills, and in places by cliffs, of which the finest are the Hockamixon Rocks, 3 m. long and above 200 ft. high. At Trenton there is a fall of 8 ft. Below Trenton the river becomes a broad, sluggish inlet of the sea, with many marshes along its side, widening steadily into its great estuary, Delaware Bay. Its main tributaries in New York are Mongaup and Neversink rivers and Callicoon Creek; from Pennsylvania, Lackawaxen, Lehigh and Schuylkill rivers; and from New Jersey, Rancocas Creek and Musconetcong and Maurice rivers. Commerce was once important on the upper river, but only before the beginning of railway competition (1857). The Delaware division of the Pennsylvania Canal, running parallel with the river from Easton to Bristol, was opened in 1830. A canal from Trenton to New Brunswick unites the waters of the Delaware and Raritan rivers; the Morris and the Delaware and Hudson canals connect the Delaware and Hudson rivers; and the Delaware and Chesapeake canal joins the waters of the Delaware with those of the Chesapeake Bay. The mean tides below Philadelphia are about 6 ft. The magnitude of the commerce of Philadelphia has made the improvements of the river below that port of great importance. Small improvements were attempted by Pennsylvania as early as 1771, but apparently never by New Jersey. The ice floods at Easton are normally 10 to 20 ft., and in 1841 attained a height of 35 ft. These floods constitute a serious difficulty in the improvement of the lower river. In the “project of 1885” the United States government undertook systematically the formation of a 26-ft. channel 600 ft. wide from Philadelphia to deep water in Delaware Bay; $1,532,688.81 was expended—about $200,000 of that amount for maintenance—before the 1885 project was superseded by a paragraph of the River and Harbor Act of the 3rd of March 1899, which provided for a 30-ft. channel 600 ft. wide from Philadelphia to the deep water of the bay. In 1899 the project of 1885 had been completed except for three shoal stretches, whose total length, measured on the range lines, was $4\frac{3}{8}$ m. The project of 1899, estimated to cost $5,810,000, was not completed at the close of the fiscal year (June 30) 1907, when $4,936,550.63 had been expended by the Federal government on the work; in 1905 the state of Pennsylvania appropriated $750,000 for improvement of the river in Pennsylvania, south of Philadelphia.

DELAWARE WATER-GAP, a borough and summer resort of Monroe county, Pennsylvania, U.S.A., on the Delaware river, about 108 m. N. of Philadelphia and about 88 m. W. by N. of New York. Pop. (1890) 467; (1900) 469. It is served directly by the Delaware, Lackawanna & Western, and by the Belvidere division of the Pennsylvania railways; along the river on the opposite side (in New Jersey) runs the New York, Susquehanna & Western railway, and the borough is connected with Stroudsburg, Pa. (about 3 m. W. by N.) by an electric line. The borough was named from the neighbouring gorge, which is noted for the picturesqueness of its scenery, especially in winter, when the ice piles up in the river, sometimes to a height of 20 ft. Here the river cuts through the Kittatinny (Blue) Ridge to its base. On the New Jersey side is Mt. Tammany (about 1600 ft.); on the Pennsylvania side, Mt. Minsi (about 1500 ft.); the elevation of the river here is about 300 ft. The gap (about 2 m. long) through the mountain is the result of erosion by the waters of a great river which flowed northwards acting along a line of faulting at right angles to the strike of the tilted rock formations. The scenery and the delightful climate have made the place a popular summer resort. The borough was incorporated in 1889.

See L. W. Brodhead, *The Delaware Water-Gap* (Philadelphia, 2nd ed., 1870).

DE LA WARR, or Delaware, an English barony, the holders of which are descended from Roger de la Warr of Isfield, Sussex, who was summoned to parliament as a baron in 1299 and the following years. He died about 1320; his great-grandson Roger, to whom the French king John surrendered at the battle of Poitiers, died in 1370; and the male line of the family became extinct on the death of Thomas, 5th baron, in 1426.

The 5th baron’s half-sister Joan married Thomas West, 1st Lord West (d. 1405), and in 1415 her second son Reginald (1394-1451) succeeded his brother Thomas as 3rd Lord West. After the death of his uncle Thomas, 5th Baron De La Warr, whose estates he inherited, Reginald was summoned to parliament as Baron La Warr, and he is thus the second founder of the family. His grandson was Thomas, 3rd (or 8th) baron (d. 1525), a courtier during the reigns of Henry VII. and Henry VIII.; and the latter’s son was Thomas, 4th (or 9th) baron (*c.* 1472-1554). The younger Thomas was a very prominent person during the reigns of Henry VIII. and Edward VI. After serving with the English army in France in 1513 and being present at the Field of the Cloth of Gold, he rebuilt the house at Halnaker in Sussex, which he had obtained by marriage, and here in 1526 he entertained Henry VIII. “with great cheer.” He disliked the ecclesiastical changes introduced by the king, and he was one of the peers who tried Anne Boleyn; later he showed some eagerness to stand well with Thomas Cromwell, but this did not prevent his arrest in 1538. He is said to have denounced “the plucking down of

abbeys," and he certainly consorted with many suspected persons. But he was soon released and pardoned, although he was obliged to hand over Halnaker to Henry VIII., receiving instead the estate of Wherwell in Hampshire. He died without children in September 1554, when his baronies of De La Warr and West fell into abeyance. His monument may still be seen in the church at Broadwater, Sussex.

He had settled his estates on his nephew William West (*c.* 1519-1595), who then tried to bring about his uncle's death by poison; for this reason he was disabled by act of parliament (1549) from succeeding to his honours. However, in 1563 he was restored, and in 1570 was created by patent Baron De La Warr. This was obviously a new creation, but in 1596 his son Thomas (*c.* 1556-1602) claimed precedency in the baronage as the holder of the ancient barony of De La Warr. His claim was admitted, and accordingly his son and successor, next mentioned, is called the 3rd or the 12th baron.

THOMAS WEST, 3rd or 12th Baron De La Warr (1577-1618), British soldier and colonial governor in America, was born on the 9th of July 1577, probably at Wherwell, Hampshire, where he was baptized. He was educated at Queen's College, Oxford, where he did not complete his course, but subsequently (1605) received the degree of M.A. In 1597 he was elected member of parliament for Lymington, and subsequently fought in Holland and in Ireland under the earl of Essex, being knighted for bravery in battle in 1599. He was imprisoned for complicity in Essex's revolt (1600-1601), but was soon released and exonerated. In 1602 he succeeded to his father's title and estates and became a privy councillor. Becoming interested in schemes for the colonization of America, he was chosen a member of the council of the Virginia Company in 1609, and in the same year was appointed governor and captain-general of Virginia for life. Sailing in March 1610 with three ships, 150 settlers and supplies, he himself bearing the greater part of the expense of the expedition, he arrived at Jamestown on the 10th of June, in time to intercept the colonists who had embarked for England and were abandoning the enterprise. Lord De La Warr's rule was strict but just; he constructed two forts near the mouth of the James river, rebuilt Jamestown, and in general brought order out of chaos. In March 1611 he returned to London, where he published at the request of the company's council, his *Relation* of the condition of affairs in Virginia (reprinted 1859 and 1868). He remained in England until 1618, when the news of the tyrannical rule of the deputy, Samuel Argall, led him to start again for Virginia. He embarked in April, but died en route on the 7th of June 1618, and was buried at sea. The Delaware river and the state of Delaware were named in his honour.

A younger brother, Francis (1586-c. 1634), was prominent in the affairs of Virginia, and in 1627-1628 was president of the council, and acting-governor of the colony.

In 1761 the 3rd or 12th baron's descendant, John, 7th or 16th Baron De La Warr (1693-1766), was created Viscount Cantelupe and 1st Earl De La Warr. He was a prominent figure in the House of Lords, at first as a supporter of Sir Robert Walpole. He also served in the British army and fought at Dettingen, and was made governor of Guernsey in 1752.

George John West, 5th earl (1791-1869), married Elizabeth, sister and heiress of George John Frederick Sackville, 4th duke of Dorset, who was created Baroness Buckhurst in 1864; consequently in 1843 he and his sons took the name of Sackville-West. The earl was twice lord chamberlain to Queen Victoria, and he is celebrated as "Fair Euryalus" in the *Childish Recollections* of his schoolfellow, Lord Byron. His son Charles Richard (1815-1873), 6th earl, served in the first Sikh war and in the Crimea; and being unmarried was succeeded by his brother Reginald (1817-1896) as 7th Earl De La Warr. Having inherited his mother's barony of Buckhurst on her death in 1870, he retained this title along with the barony and earldom of De La Warr, although the patent had contained a proviso that it should be kept separate from these dignities. In 1896 the 7th earl's son, Gilbert George Reginald Sackville-West (b. 1869), became 8th earl De La Warr.

See G. E. C(okayne), *Complete Peerage* (1887-1898).

DELBRÜCK, HANS (1848-), German historian, was born at Bergen on the island of Rügen on the 11th of November 1848, and studied at the universities of Heidelberg and Bonn. As a soldier he fought in the Franco-German War, after which he was for some years tutor to one of the princes of the German imperial family. In 1885 he became professor of modern history in the university of Berlin, and he was a member of the German Reichstag from 1884 to 1890. Delbrück's writings are chiefly concerned with the history of the art of war, his most ambitious work being his *Geschichte der Kriegskunst im Rahmen der politischen Geschichte* (first section, *Das Altertum*, 1900; second, *Römer und Germanen*, 1902; third, *Das Mittelalter*, 1907). Among his other works are: *Die Perserkriege und die Burgunderkriege* (Berlin, 1887); *Historische und politische Aufsätze* (1886); *Erinnerungen, Aufsätze und Reden* (1902); *Die Strategie des Perikles erläutert durch die Strategie Friedrichs des Grossen* (1890); *Die Polenfrage* (1894); and *Das Leben des Feldmarschalls Grafen Neithardt von Gneisenau* (1882 and 1894). Delbrück began in 1883 to edit the *Preussische Jahrbücher*, in which he has written many articles, including one on "General Wolseley über Napoleon, Wellington und Gneisenau," and he has contributed to the *Europäischer Geschichtskalender* of H. Schulthess.

DELBRÜCK, MARTIN FRIEDRICH RUDOLF VON, Prussian statesman (1817-1903), was born at Berlin on the 16th of April 1817. On completing his legal studies he entered the service of the state in 1837; and after holding a series of minor posts was transferred in 1848 to the ministry of commerce, which was to be the sphere of his real life's work. Both Germany and Austria had realized the influence of commercial upon

political union. Delbrück in 1851 induced Hanover, Oldenburg and Schaumburg-Lippe to join the Zollverein; and the southern states, which had agreed to admit Austria to the union, found themselves forced in 1853 to renew the old union, from which Austria was excluded. Delbrück now began, with the support of Bismarck, to apply the principles of free trade to Prussian fiscal policy. In 1862 he concluded an important commercial treaty with France. In 1867 he became the first president of the chancery of the North German Confederation, and represented Bismarck on the federal tariff council (*Zollbundesrath*), a position of political as well as fiscal importance owing to the presence in the council of representatives of the southern states. In 1868 he became a Prussian minister without portfolio. In October 1870, when the union of Germany under Prussian headship became a practical question, Delbrück was chosen to go on a mission to the South German states, and contributed greatly to the agreements concluded at Versailles in November. In 1871 he became president of the newly constituted *Reichskanzleramt*. Delbrück, however, began to feel himself uneasy under Bismarck's leanings towards protection and state control. On the introduction of Bismarck's plan for the acquisition of the railways by the state, Delbrück resigned office, nominally on the ground of ill-health (June 1, 1876). In 1879 he opposed in the *Reichstag* the new protectionist tariff, and on the failure of his efforts retired definitely from public life. In 1896 he received from the emperor the order of the Black Eagle. He died at Berlin on the 1st of February 1903.

DELCASSÉ, THÉOPHILE (1852-), French statesman, was born at Pamiers, in the department of Ariège, on the 1st of March 1852. He wrote articles on foreign affairs for the *République française* and *Paris*, and in 1888 was elected *conseiller général* of his native department, standing as "un disciple fidèle de Gambetta." In the following year he entered the chamber as deputy for Foix. He was appointed under-secretary for the colonies in the second Ribot cabinet (January to April 1893), and retained his post in the Dupuy cabinet till its fall in December 1893. It was largely owing to his efforts that the French colonial office was made a separate department with a minister at its head, and to this office he was appointed in the second Dupuy cabinet (May 1894 to January 1895). He gave a great impetus to French colonial enterprise, especially in West Africa, where he organized the newly acquired colony of Dahomey, and despatched the Liotard mission to the Upper Ubangi. While in opposition he devoted special attention to naval affairs, and in speeches that attracted much notice declared that the function of the French navy was to secure and develop colonial enterprise, deprecated all attempts to rival the British fleet, and advocated the construction of commerce destroyers as France's best reply to England. On the formation of the second Brisson cabinet in June 1898 he succeeded M. Hanotaux at the foreign office, and retained that post under the subsequent premierships of MM. Dupuy, Waldeck-Rousseau, Combes and Rouvier. In 1898 he had to deal with the delicate situation caused by Captain Marchand's occupation of Fashoda, for which, as he admitted in a speech in the chamber on the 23rd of January 1899, he accepted full responsibility, since it arose directly out of the Liotard expedition, which he had himself organized while minister for the colonies; and in March 1899 he concluded an agreement with Great Britain by which the difficulty was finally adjusted, and France consolidated her vast colonial empire in North-West Africa. In the same year he acted as mediator between the United States and Spain, and brought the peace negotiations to a successful conclusion. He introduced greater cordiality into the relations of France with Italy: at the same time he adhered firmly to the alliance with Russia, and in August 1899 made a visit to St Petersburg, which he repeated in April 1901. In June 1900 he made an arrangement with Spain, fixing the long-disputed boundaries of the French and Spanish possessions in West Africa. Finally he concluded with England the important Agreements of 1904 covering colonial and other questions which had long been a matter of dispute, especially concerning Egypt, Newfoundland and Morocco. Suspicion of the growing *entente* between France and England soon arose on the part of Germany, and in 1905 German assertiveness was shown in a crisis which was forced on in the matter of the French activity in Morocco (*q.v.*), in which the handling of French policy by M. Delcassé personally was a sore point with Germany. The situation became acute in April, and was only relieved by M. Delcassé's resignation of office. He retired into private life, but in 1908 was warmly welcomed on a visit to England, where the closest relations now existed with France.

DEL CREDERE (Ital. "of belief" or "trust"). A "del credere agent," in English law, is one who, selling goods for his principal on credit, undertakes for an additional commission to sell only to persons who are absolutely solvent. His position is thus that of a surety who is liable to his principal should the vendee make default. The agreement between him and his principal need not be reduced to or evidenced by writing, for his undertaking is not a guarantee within the Statute of Frauds. See also Broker; Guarantee.

DELESCLUZE, LOUIS CHARLES (1809-1871), French journalist, was born at Dreux on the 2nd of October 1809. Having studied law in Paris, he early developed a strong democratic bent, and played a part in the July revolution of 1830. He became a member of various republican societies, and in 1836 was forced to take refuge in Belgium, where he devoted himself to republican journalism. Returning in 1840 he settled in Valenciennes, and after the revolution of 1848 removed to Paris, where he started a newspaper called *La*

Révolution démocratique et sociale. His zeal so far outran his discretion that he was twice imprisoned and fined, his paper was suppressed and he himself fled to England, where he continued his journalistic work. He was arrested in Paris in 1853, and deported to French Guiana. Released under the amnesty of 1859, he returned to France with health shattered but energies unimpaired. His next venture was the publication of the *Réveil*, a radical organ upholding the principles of the *Association internationale des travailleurs*, known as the "*Internationale*." This journal, which brought him three condemnations, fine and imprisonment in one year, shared the fate of his Paris sheet, and its founder again fled to Belgium. In 1871 he was elected to the National Assembly, becoming afterwards a member of the Paris commune. At the siege of Paris he fought with reckless courage, and met his death on the last of the barricades (May 1871). He wrote an account of his imprisonment in Guiana, *De Paris à Cayenne, Journal d'un transporté* (Paris, 1869).

DELESSE, ACHILLE ERNEST OSCAR JOSEPH (1817-1881), French geologist and mineralogist, was born at Metz on the 3rd of February 1817. At the age of twenty he entered the École Polytechnique, and subsequently passed through the École des Mines. In 1845 he was appointed to the chair of mineralogy and geology at Besançon; in 1850 to the chair of geology at the Sorbonne in Paris; and in 1864 professor of agriculture at the École des Mines. In 1878 he became inspector-general of mines. In early years as *ingénieur des mines* he investigated and described various new minerals; he proceeded afterwards to the study of rocks, devising new methods for their determination, and giving particular descriptions of melaphyre, arkose, porphyry, syenite, &c. The igneous rocks of the Vosges, and those of the Alps, Corsica, &c., and the subject of metamorphism occupied his attention. He also prepared in 1858 geological and hydrological maps of Paris—with reference to the underground water, similar maps of the departments of the Seine and Seine-et-Marne, and an agronomic map of the Seine-et-Marne (1880), in which he showed the relation which exists between the physical and chemical characters of the soil and the geological structure. His annual *Revue des progrès de géologie*, undertaken with the assistance (1860-1865) of Auguste Laugel and afterwards (1865-1878) of Albert de Lapparent, was carried on from 1860 to 1880. His observations on the lithology of the deposits accumulated beneath the sea were of special interest and importance. His separate publications were: *Recherches sur l'origine des roches* (Paris, 1865); *Étude sur le métamorphisme des roches* (1869); *Lithologie des mers de France et des mers principales du globe* (2 vols. and atlas, 1871). He died at Paris on the 24th of March 1881.

DELESSERT, JULES PAUL BENJAMIN (1773-1847), French banker, was born at Lyons on the 14th of February 1773, the son of Étienne Delessert (1735-1816), the founder of the first fire insurance company and the first discount bank in France. Young Delessert was travelling in England when the Revolution broke out in France, but he hastened back to join the Paris National Guard in 1790, becoming an officer of artillery in 1793. His father bought him out of the army, however, in 1795 in order to entrust him with the management of his bank. Gifted with remarkable energy, he started many commercial enterprises, founding the first cotton factory at Passy in 1801, and a sugar factory in 1802, for which he was created a baron of the empire. He sat in the chamber of deputies for many years, and was a strong advocate for many humane measures, notably the suppression of the "Tours" or revolving box at the foundling hospital, the suppression of the death penalty, and the improvement of the penitentiary system. He was made regent of the Bank of France in 1802, and was also member of, and, indeed, founder of many, learned and philanthropic societies. He founded the first savings bank in France, and maintained a keen interest in it until his death in 1847. He was also an ardent botanist and conchologist; his botanical library embraced 30,000 volumes, of which he published a catalogue—*Musée botanique de M. Delessert* (1845). He also wrote *Des avantages de la caisse d'épargne et de prévoyance* (1835), *Mémoire sur un projet de bibliothéque royale* (1836), *Le Guide de bonheur* (1839), and *Recueil de coquilles décrites par Lamarck* (1841-1842).

DELFICO, MELCHIORRE (1744-1835), Italian economist, was born at Teramo in the Abruzzi on the 1st of August 1744, and was educated at Naples. He devoted himself specially to the study of jurisprudence and political economy, and his numerous publications exercised great practical influence in the correction and extinction of many abuses. Under Joseph Bonaparte Delfico was made a councillor of state, an office which he held until the restoration of Ferdinand IV., when he was appointed president of the commission of archives, from which he retired in 1825. He died at Teramo on the 21st of June 1835. His more important works were: *Saggio filosofico sul matrimonio* (1774); *Memoria sul Tribunale della Grascia e sulle leggi economiche nelle provincie confinanti del regno* (1785), which led to the abolition in Naples of the most vexatious and absurd restrictions on the sale and exportation of agricultural produce; *Riflessioni su la vendita dei feudi* (1790) and *Lettera a Sua Ecc. il sig. Duca di Cantalupo* (1795), which brought about the abolition of feudal rights over landed property and their sale; *Ricerche sul vero carattere della giurisprudenza Romana e dei suoi cultori* (1791); *Pensieri su la storia e su l' incertezza ed inutilità della medesima* (1806), both on the early history of Rome.

See F. Mozzetti, *Degli studii, delle opere e delle virtù di Melchiorre Delfico*; Tipaldo's *Biographia degli Italiani illustri* (vol. ii.).

DELFT, a town of Holland in the province of South Holland, on the Schie, 5 m. by rail S.E. by S. of the Hague, with which it is also connected by steam-tramway. Pop. (1900) 31,582. It is a quiet, typically Dutch town, with its old brick houses and tree-bordered canals. The Prinsenhof, previously a monastery, was converted into a residence for the counts of Orange in 1575; it was here that William the Silent was assassinated. It is now used as a William of Orange Museum. The New Church, formerly the church of St Ursula (14th century), is the burial place of the princes of Orange. It is remarkable for its fine tower and chime of bells, and contains the splendid allegorical monument of William the Silent, executed by Hendrik de Keyser and his son Pieter about 1621, and the tomb of Hugo Grotius, born in Delft in 1583, whose statue, erected in 1886, stands in the market-place outside the church. The Old Church, founded in the 11th century, but in its present form dating from 1476, contains the monuments of two famous admirals of the 17th century, Martin van Tromp and Piet Hein, as well as the tomb of the naturalist Leeuwenhoek, born at Delft in 1632. In the town hall (1618) are some corporation pictures, portraits of the counts of Orange and Nassau, including several by Michiel van Mierevelt (1567-1641), one of the earliest Dutch portrait painters, and with his son Pieter (1595-1623), a native of Delft. There are also a Roman Catholic church (1882) and a synagogue. Two important educational establishments are the Indian Institute for the education of civil service students for the colonies, to which is attached an ethnographical museum; and the Royal Polytechnic school, which almost ranks as a university, and teaches, among other sciences, that of diking. A fine collection of mechanical models is connected with the polytechnic school. Among other buildings are the modern "Phoenix" club-house of the students; the hospital, containing some anatomical pictures, including one by the two Mierevelts (1617); a lunatic asylum; the Van Renswoude orphanage, the theatre, a school of design, the powder magazine and the state arsenal, originally a warehouse of the East India Company, and now used as a manufactory of artillery stores.

The name of Delft is most intimately associated with the manufacture of the beautiful faience pottery for which it was once famous. (See Ceramics.) This industry was imported from Haarlem towards the end of the 16th century, and achieved an unrivalled position in the second half of the following century; but it did not survive the French occupation at the end of the 18th century. It has, however, been revived in modern times under the name of "New Delft." Other branches of industry are carpet-weaving, distilling, oil and oil-cake manufacture, dyeing, cooperage and the manufacture of arms and bullets. There is also an important butter and cheese market.

Delft was founded in 1075 by Godfrey III., duke of Lower Lorraine, after his conquest of Holland, and came subsequently into the hands of the counts of Holland. In 1246 it received a charter from Count William II. (see C. Hegel, *Städte und Gilden*, ii. 251). In 1536 it was almost totally destroyed by fire, and in 1654 largely ruined by the explosion of a powder magazine.

DELHI, Dehli or Dilli, the ancient capital of the Mogul empire in India, and a modern city which gives its name to a district and division of British India. The city of Delhi is situated in 28° 38′ N., 77° 13′ E., very nearly due north of Cape Comorin, and practically in a latitudinal line with the more ancient cities of Cairo and Canton. It lies in the south-east corner of the province of the Punjab, to which it was added in 1858, and abuts on the right bank of the river Jumna. Though Lahore, the more ancient city, remains the official capital of the Punjab, Delhi is historically more famous, and is now more important as a commercial and railway centre.

Though the remains of earlier cities are scattered round Delhi over an area estimated to cover some 45 sq. m., modern Delhi dates only from the middle of the 17th century, when Shah Jahan rebuilt the city on its present site, adding the title Shah-jahanabad from his own name. It extends for nearly 2¼ m. along the right bank of the Jumna from the Water bastion to the Wellesley bastion in the south-east corner, nearly one-third of the frontage being occupied by the river wall of the palace. The northern wall, famous in the siege of Delhi in 1857, extends three-quarters of a mile from the Water bastion to the Shah, commonly known as the Mori, bastion; the length of the west wall from this bastion to the Ajmere gate is 1¼ m. and of the south wall to the Wellesley bastion again almost exactly the same distance, the whole land circuit being thus 3¼ m. The complete circuit of Delhi is 5½ m. In the north wall is situated the famous Kashmir gate, while the Mori or Drain gate, which was built by a Mahratta governor, has now been removed. In the west wall are the Farash Khana and Ajmere gates, while the Kabul and Lahore gates have been removed. In the south wall are the Turkman and Delhi gates. The gates on the river side of the city included the Khairati and Rajghat, the Calcutta and Nigambod—both removed; the Kela gate, and the Badar Rao gate, now closed. The great wall of Delhi, which was constructed by Shah Jahan, was strengthened by the English by the addition of a ditch and glacis, after Delhi was captured by Lord Lake in 1803; and its strength was turned against the British at the time of the Mutiny. The imperial palace (1638-1648), now known as the "Fort," is situated on the east of the city, and abuts directly on the river. It consists at present of bare and ugly British barracks, among which are scattered exquisite gems of oriental architecture. The two most famous among its buildings are the Diwan-i-Am or Hall of Public Audience, and the Diwan-i-Khas or Hall of Private Audience. The Diwan-i-Am is a splendid building measuring 100 ft. by 60 ft., and was formerly plastered with chunam and overlaid with

gold. The most striking effect now lies in its engrailed arches. It was in the recess in the back wall of this hall that the famous Peacock Throne used to stand, “so called from its having the figures of two peacocks standing behind it, their tails being expanded and the whole so inlaid with sapphires, rubies, emeralds, pearls and other precious stones of appropriate colours as to represent life.” Tavernier, the French jeweller, who saw Delhi in 1665, describes the throne as of the shape of a bed, 6 ft. by 4 ft., supported by four golden feet, 20 to 25 in. high, from the bars above which rose twelve columns to support the canopy; the bars were decorated with crosses of rubies and emeralds, and also with diamonds and pearls. In all there were 108 large rubies on the throne, and 116 emeralds, but many of the latter had flaws. The twelve columns supporting the canopy were decorated with rows of splendid pearls, and Tavernier considered these to be the most valuable part of the throne. The whole was valued at £6,000,000. This throne was carried off by the Persian invader Nadir Shah in 1739, and has been rumoured to exist still in the Treasure House of the Shah of Persia; but Lord Curzon, who examined the thrones there, says that nothing now exists of it, except perhaps some portions worked up in a modern Persian throne. The Diwan-i-Khas is smaller than the Diwan-i-Am, and consists of a pavilion of white marble, in the interior of which the art of the Moguls reached the perfection of its jewel-like decoration. On a marble platform rises a marble pavilion, the flat-coned roof of which is supported on a double row of marble pillars. The inner face of the arches, with the spandrils and the pilasters which support them, are covered with flowers and foliage of delicate design and dainty execution, crusted in green serpentine, blue *lapis lazuli* and red and purple porphyry. During the lapse of years many of these stones were picked from their setting, and the silver ceiling of flowered patterns was pillaged by the Mahrattas; but the inlaid work was restored as far as possible by Lord Curzon. It is in this hall that the famous inscription “If a paradise be on the face of the earth, it is this, it is this, it is this,” still exists. It is given in Persian characters twice in the panels over the narrow arches at the ends of the middle hall, beginning from the east on the north side, and from the west at the south side. At the time of the Delhi Durbar held in January 1903 to celebrate the proclamation of Edward VII. as emperor of India these two halls were used as a dancing-room and supper-room, and their full beauty was brought out by the electric light shining through their marble grille-work.

The native city of Delhi is like most other cities in India, a huddle of mean houses in mean streets, diversified with splendid mosques. The Chandni Chauk (“silver street”), the principal street of Delhi, which was once supposed to be the richest street in the world, has fallen from its high estate, though it is still a broad and imposing avenue with a double row of trees running down the centre. During the course of its history it was four times sacked, by Nadir Shah, Timur, Ahmad Shah and the Mahrattas, and its roadway has many times run with blood. Now it is the abode of the jewellers and ivory-workers of Delhi, but the jewels are seldom valuable and the carving has lost much of its old delicacy. A short distance south of the Chandni Chauk the Jama Masjid, or Great Mosque, rises boldly from a small rocky eminence. It was erected in 1648-1650, two years after the royal palace, by Shah Jahan. Its front court, 450 ft. square, and surrounded by a cloister open on both sides, is paved with granite inlaid with marble, and commands a fine view of the city. The mosque itself, a splendid structure forming an oblong 261 ft. in length, is approached by a magnificent flight of stone steps. Three domes of white marble rise from its roof, with two tall minarets at the front corners. The interior of the mosque is paved throughout, and the walls and roof are lined, with white marble. Two other mosques in Delhi itself deserve passing notice, the Kala Masjid or Black Mosque, which was built about 1380 in the reign of Feroz Shah, and the Moti Masjid or Pearl Mosque, a tiny building added to the palace by Aurangzeb, as the emperor’s private place of prayer. It is only 60 ft. square, and the domes alone are seen above the red sandstone walls until the opening of two small fine brass gates.

To the west and north-west of Delhi considerable suburbs cluster beyond the walls. Here are the tombs of the imperial family. That of Humayun, the second of the Mogul dynasty, is a noble building of rose-coloured sandstone inlaid with white marble. It lies about 3 m. from the city, in a terraced garden, the whole surrounded by an embattled wall, with towers and four gateways. In the centre stands a platform about 20 ft. high by 200 ft. square, supported by arches and ascended by four flights of steps. Above, rises the mausoleum, also a square, with a great dome of white marble in the centre. About a mile to the west is another burying-ground, or collection of tombs and small mosques, some of them very beautiful. The most remarkable is perhaps the little chapel in honour of a celebrated Mussulman saint, Nizam-ud-din, near whose shrine the members of the imperial family, up to the time of the Mutiny, lie buried, each in a small enclosure surrounded by lattice-work of white marble.

Still farther away, some 10 m. south of the modern city, amid the ruins of old Delhi, stands the Kutb Minar, which is supposed to be the most perfect tower in the world, and one of the seven architectural wonders of India. The Minar was begun by Kutb-ud-din Aibak about A.D. 1200. The two top storeys were rebuilt by Feroz Shah. It consists of five storeys of red sandstone and white marble. The purplish red of the sandstone at the base is finely modulated, through a pale pink in the second storey, to a dark orange at the summit, which harmonizes with the blue of an Indian sky. Dark bands of Arabic writing round the three lower storeys contrast with the red sandstone. The height of the column is 238 ft. The plinth is a polygon of twenty sides. The basement storey has the same number of faces formed into convex flutes which are alternately angular and semicircular. The next has semicircular flutes, and in the third they are all angular. Then rises a plain storey, and above it soars a partially fluted storey, the shaft of which is adorned with bands of marble and red sandstone. A bold projecting balcony, richly ornamented, runs round each storey. After six centuries the column is almost as fresh as on the day it was finished. It stands in the south-east corner of the outer court of the mosque erected by Kutb-ud-din immediately after his capture of Delhi in 1193. The design of this mosque is Mahommedan, but the wonderfully delicate ornamentation of its western façade and other remaining parts is Hindu. In the inner courtyard of the mosque stands the Iron Pillar, which is probably the most ancient monument in the neighbourhood of Delhi, dating from about A.D. 400. It consists of a solid shaft of wrought iron some 16 in. in diameter and 23 ft. 8 in. in height, with an inscription eulogizing Chandragupta Vikramaditya. It was brought, probably from Muttra, by Anang Pal, a Rajput chief of the Tomaras, who erected it here in 1052.[1]

Among the modern buildings of Delhi may be mentioned the Residency, now occupied by a government high school, and the Protestant church of St James, built at a coast of £10,000 by Colonel Skinner, an officer

well known in the history of the East India Company. About half-way down the Chandni Chauk is a high clock-tower. Near it is the town hall, with museum and library. Behind the Chandni Chauk, to the north, lie the Queen's Gardens; beyond them the "city lines" stretch away as far as the well-known rocky ridge, about a mile outside the town. From the summit of this ridge the view of the station and city is very picturesque. The principal local institution until 1877 was the Delhi College, founded in 1792. It was at first exclusively an oriental school, supported by the voluntary contributions of Mahommedan gentlemen, and managed by a committee of the subscribers. In 1829 an English department was added to it; and in 1855 the institution was placed under the control of the Educational Department. In the Mutiny of 1857 the old college was plundered of a very valuable oriental library, and the building completely destroyed. A new college was founded in 1858, and was affiliated to the university of Calcutta in 1864. The old college attained to great celebrity as an educational institution, and produced many excellent scholars, but it was abolished in 1877, in order to concentrate the grant available for higher-class education upon the Punjab University at Lahore.

The Ridge, famous as the British base during the siege of Delhi during the Mutiny, in 1857, is a last outcrop of the Aravalli Hills which rises in a steep escarpment some 60 ft. above the city. At its nearest point on the right of the British position, where the Mutiny Memorial now stands, the Ridge is only 1200 yds. from the walls of Delhi; at the Flagstaff Tower in the centre of the position it is a mile and a half away; and at the left near the river nearly two miles and a half. It was behind the Ridge at this point that the main portion of the British camp was pitched. The Mutiny Memorial, which was erected by the army before Delhi, is a rather poor specimen of a Gothic spire in red sandstone, while the memorial tablets are of inferior marble. Next to the Ridge the point of most interest to every English visitor to Delhi is Nicholson's grave, which lies surrounded by an iron railing in the Kashmir gate cemetery. The Kashmir gate itself bears a slab recording the gallant deed of the party under Lieutenants D. C. Home and P. Salkeld, who blew in the gate in broad daylight on the day that Delhi was taken by assault.

The population of Delhi according to the census of 1901 was 208,575, of whom 88,460 were Mahommedans and 114,417 were Hindus. The city is served by five different railways, the East Indian, the Oudh & Rohilkhand, the Rajputana-Malwa & Bombay-Baroda, the Southern Punjab, and the North-Western, and occupies a central position, being 940 m. from Karachi, 950 from Calcutta, and 960 from Bombay. Owing to the advantages it enjoys as a trade centre, Delhi is recovering much of the prominence which it lost at the time of the Mutiny. It has spinning-mills and other mills worked by steam. The principal manufactures are gold and silver filigree work and embroidery, jewelry, muslins, shawls, glazed pottery and wood-carving.

The District of Delhi has an area of 1290 sq. m. It consists of a strip of territory on the right or west bank of the Jumna river, 75 m. in length, and varying from 15 to 233 m. in breadth. Most of the district consists of hard and stony soil, depending upon irrigation, which is supplied by the Western Jumna canal, the Ali Mardan canal and the Agra canal. The principal crops are wheat, barley, sugar-cane and cotton.

When Lord Lake broke the Mahratta power in 1803, and the emperor was taken under the protection of the East India Company, the present districts of Delhi and Hissar were assigned for the maintenance of the royal family, and were administered by a British resident. In 1832 the office of resident was abolished, and the tract was annexed to the North-Western Provinces. After the Mutiny in 1858 it was separated from the North-Western Provinces and annexed to the Punjab. The population in 1901 was 689,039.

The Division of Delhi stretches from Simla to Rajputana, and is much broken up by native states. It comprises the seven districts of Hissar, Rohtak, Gurgaon, Delhi, Karnal, Umballa and Simla. Its total area is 15,393 sq. m., and in 1901 the population was 4,587,092.

History.—According to legends, which may or may not have a substantial basis, Delhi or its immediate neighbourhood has from time immemorial been the site of a capital city. The neighbouring village of Indarpat preserves the name of Indraprashta, the semi-mythical city founded, according to the Sanscrit epic *Mahabharata*, by Yudisthira and his brothers, the five Pandavas. Whatever its dim predecessors may have been, however, the actual history of Delhi dates no further back than the 11th century A.D., when Anangapala (Anang Pal), a chief of the Tomara clan, built the Red Fort, in which the Kutb Minar now stands; in 1052 the same chief removed the famous Iron Pillar from its original position, probably at Muttra, and set it up among a group of temples of which the materials were afterwards used by the Mussulmans for the construction of the great Kutb Mosque. About the middle of the 12th century the Tomara dynasty was overthrown by Vigraha-raja (Visala-deva, Bisal Deo), the Chauhan king of Ajmere, who from inscribed records discovered of late years appears to have been a man of considerable culture (see V. A. Smith, *Early Hist. of India*, ed. 1908, p. 356). His nephew and successor was Prithwi-raja (Prithiraj, or Rai Pithora), lord of Sambhar, Delhi and Ajmere, whose fame as lover and warrior still lives in popular story. He was the last Hindu ruler of Delhi. In 1191 came the invasion of Mahommed of Ghor. Defeated on this occasion, Mahommed returned two years later, overthrew the Hindus, and captured and put to death Prithwi-raja. Delhi became henceforth the capital of the Mahommedan Indian empire, Kutb-ud-din (the general and slave of Mahommed of Ghor) being left in command. His dynasty is known as that of the slave kings, and it is to them that old Delhi owes its grandest remains, among them Kutb Mosque and the Kutb Minar. The slave dynasty retained the throne till 1290, when it was subverted by Jalal-ud-din Khilji. The most remarkable monarch of this dynasty was Ala-ud-din, during whose reign Delhi was twice exposed to attack from invading hordes of Moguls. On the first occasion Ala-ud-din defeated them under the walls of his capital; on the second, after encamping for two months in the neighbourhood of the city, they retired without a battle. The house of Khilji came to an end in 1321, and was followed by that of Tughlak. Hitherto the Pathan kings had been content with the ancient Hindu capital, altered and adorned to suit their tastes. But one of the first acts of the founder of the new dynasty, Ghias-ud-din Tughlak, was to erect a new capital about 4 m. farther to the east, which he called Tughlakabad. The ruins of his fort remain, and the eye can still trace the streets and lanes of the long deserted city. Ghias-ud-din was succeeded by his son Mahommed b. Tughlak, who reigned from 1325 to 1351, and is described by Elphinstone as "one of the most accomplished princes and most furious tyrants that ever adorned or disgraced human nature." Under this monarch the Delhi of the Tughlak dynasty attained its utmost growth. His successor Feroz Shah Tughlak transferred the capital to a new town which he founded some miles off, on the north of the Kutb, and to which he gave his own name, Ferozabad. In 1398, during the reign of Mahmud

Tughlak, occurred the Tatar invasion of Timurlane. The king fled to Gujarat, his army was defeated under the walls of Delhi, and the city surrendered. The town, notwithstanding a promise of protection, was plundered and burned; the citizens were massacred. The invaders at last retired, leaving Delhi without a government, and almost without inhabitants. At length Mahmud Tughlak regained a fragment of his former kingdom, but on his death in 1412 the family became extinct. He was succeeded by the Sayyid dynasty, which held Delhi and a few miles of surrounding territory till 1444, when it gave way to the house of Lodi, during whose rule the capital was removed to Agra. In 1526 Baber, sixth in descent from Timurlane, invaded India, defeated and killed Ibrahim Lodi at the battle of Panipat, entered Delhi, was proclaimed emperor, and finally put an end to the Afghan empire. Baber's capital was at Agra, but his son and successor, Humayun, removed it to Delhi. In 1540 Humayun was defeated and expelled by Sher Shah, who entirely rebuilt the city, enclosing and fortifying it with a new wall. In his time Delhi extended from where Humayun's tomb now is to near the southern gate of the modern city. In 1555 Humayun, with the assistance of Persia, regained the throne; but he died within six months, and was succeeded by his son, the illustrious Akbar.

During Akbar's reign and that of his son Jahangir, the capital was either at Agra or at Lahore, and Delhi once more fell into decay. Between 1638 and 1658, however, Shah Jahan rebuilt it almost in its present form; and his city remains substantially the Delhi of the present time. The imperial palace, the Jama Masjid or Great Mosque, and the restoration of what is now the western Jumna canal, are the work of Shah Jahan. The Mogul empire rapidly expanded during the reigns of Akbar and his successors down to Aurungzeb, when it attained its climax. After the death of the latter monarch, in 1707, came the decline. Insurrections and civil wars on the part of the Hindu tributary chiefs, Sikhs and Mahrattas, broke out. Aurungzeb's successors became the helpless instruments of conflicting chiefs. His grandson, Jahandar Shah, was, in 1713, deposed and strangled after a reign of one year; and Farrakhsiyyar, the next in succession, met with the same fate in 1719. He was succeeded by Mahommed Shah, in whose reign the Mahratta forces first made their appearance before the gates of Delhi, in 1736. Three years later the Persian monarch, Nadir Shah, after defeating the Mogul army at Karnal, entered Delhi in triumph. While engaged in levying a heavy contribution, the Persian troops were attacked by the populace, and many of them were killed. Nadir Shah, after vainly attempting to stay the tumult, at last gave orders for a general massacre of the inhabitants. For fifty-eight days Nadir Shah remained in Delhi, and when he left he carried with him a treasure in money amounting, at the lowest computation, to eight or nine millions sterling, besides jewels of inestimable value, and other property to the amount of several millions more.

From this time (1740) the decline of the empire proceeded unchecked and with increased rapidity. In 1771 Shah Alam, the son of Alamgir II., was nominally raised to the throne by the Mahrattas, the real sovereignty resting with the Mahratta chief, Sindhia. An attempt of the puppet emperor to shake himself clear of the Mahrattas, in which he was defeated in 1788, led to a permanent Mahratta garrison being stationed at Delhi. From this date, the king remained a cipher in the hands of Sindhia, who treated him with studied neglect, until the 8th of September 1803, when Lord Lake overthrew the Mahrattas under the walls of Delhi, entered the city, and took the king under the protection of the British. Delhi, once more attacked by a Mahratta army under the Mahratta chief Holkar in 1804, was gallantly defended by Colonel Ochterlony, the British resident, who held out against overwhelming odds for eight days, until relieved by Lord Lake. From this date a new era in the history of Delhi began. A pension of £120,000 per annum was allowed to the king, with exclusive jurisdiction over the palace, and the titular sovereignty as before; but the city, together with the Delhi territory, passed under British administration.

Fifty-three years of quiet prosperity for Delhi were brought to a close by the Mutiny of 1857. Its capture by the mutineers, its siege, and its subsequent recapture by the British have been often told, and nothing beyond a short notice is called for here. The outbreak at Meerut occurred on the night of the 10th of May 1857. Immediately after the murder of their officers, the rebel soldiery set out for Delhi, about 35 m. distant, and on the following morning entered the city, where they were joined by the city mob. Mr Fraser, the commissioner, Mr Hutchinson, the collector, Captain Douglas, the commandant of the palace guards, and the Rev. Mr Jennings, the residency chaplain, were at once murdered, as were also most of the civil and non-official residents whose houses were situated within the city walls. The British troops in cantonments consisted of three regiments of native infantry and a battery of artillery. These cast in their lot with the mutineers, and commenced by killing their officers. The Delhi magazine, then the largest in the north-west of India, was in the charge of Lieutenant Willoughby, with whom were two other officers and six non-commissioned officers. The magazine was attacked by the mutineers, but the little band defended to the last the enormous accumulation of munitions of war stored there, and, when further defence was hopeless, fired the magazine. Five of the nine were killed by the explosion, and Lieutenant Willoughby subsequently died of his injuries; the remaining three succeeded in making their escape. The occupation of Delhi by the rebels was the signal for risings in almost every military station in North-Western India. The revolted soldiery with one accord thronged towards Delhi, and in a short time the city was garrisoned by a rebel army variously estimated at from 50,000 to 70,000 disciplined men. The pensioned king, Bahadur Shah, was proclaimed emperor; his sons were appointed to various military commands. About fifty Europeans and Eurasians, nearly all females, who had been captured in trying to escape from the town on the day of the outbreak, were confined in a stifling chamber of the palace for fifteen days; they were then brought out and massacred in the court-yard.

The siege which followed forms one of the memorable incidents of the British history of India. On the 8th June, four weeks after the outbreak, Sir H. Barnard, who had succeeded as commander-in-chief on the death of General Anson, routed the mutineers with a handful of Europeans and Sikhs, after a severe action at Badliki-Serai, and encamped upon the Ridge that overlooks the city. The force was too weak to capture the city, and he had no siege train or heavy guns. All that could be done was to hold the position till the arrival of reinforcements and of a siege train. During the next three months the little British force on the Ridge were rather the besieged than the besiegers. Almost daily sallies, which often turned into pitched battles, were made by the rebels upon the over-worked handful of Europeans, Sikhs and Gurkhas. A great struggle took place on the centenary of the battle of Plassey (June 23), and another on the 25th of August; but on both occasions the mutineers were repulsed with heavy loss. General Barnard died of cholera in July, and was

succeeded by General Archdale Wilson. Meanwhile reinforcements and siege artillery gradually arrived, and early in September it was resolved to make the assault. The first of the heavy batteries opened fire on the 8th of September, and on the 13th a practicable breach was reported.

On the morning of the 14th Sept. the assault was delivered, the points of attack being the Kashmir bastion, the Water bastion, the Kashmir gate, and the Lahore gate. The assault was thoroughly successful, although the column which was to enter the city by the Lahore gate sustained a temporary check. The whole eastern part of the city was retaken, but at a cost of 66 officers and 1104 men killed and wounded, out of the total strength of 9866. Fighting continued more or less during the next six days, and it was not till the 20th of September that the entire city and palace were occupied, and the reconquest of Delhi was complete. During the siege, the British force sustained a loss of 1012 officers and men killed, and 3837 wounded. Among the killed was General John Nicholson, the leader of one of the storming parties, who was shot through the body in the act of leading his men, in the first day's fighting. He lived, however, to learn that the whole city had been recaptured, and died on the 23rd of September. On the flight of the mutineers, the king and several members of the royal family took refuge at Humayun's tomb. On receiving a promise that his life would be spared, the last of the house of Timur surrendered to Major Hodson; he was afterwards banished to Rangoon. Delhi, thus reconquered, remained for some months under military authority. Owing to the murder of several European soldiers who strayed from the lines, the native population was expelled the city. Hindus were soon afterwards readmitted, but for some time Mahommedans were rigorously excluded. Delhi was made over to the civil authorities in January 1858, but it was not till 1861 that the civil courts were regularly reopened. The shattered walls of the Kashmir gateway, and the bastions of the northern face of the city, still bear the marks of the cannonade of September 1857. Since that date Delhi has settled down into a prosperous commercial town, and a great railway centre. The lines which start from it to the north, south, east and west bring into its bazaars the trade of many districts. But the romance of antiquity still lingers around it, and Delhi was selected for the scene of the Imperial Proclamation on the 1st of January 1877, and for the great Durbar held in January 1903 for the proclamation of King Edward VII. as emperor of India.

AUTHORITIES.—The best modern account of the city is *Delhi, Past and Present* (1901), by H. C. Fanshawe, a former commissioner of Delhi. Other authoritative works are *Cities of India* (1903) and *The Mutiny Papers* (1893), both by G. W. Forrest, and *Forty-one Years in India* (1897), by Lord Roberts; while some impressionistic sketches will be found in *Enchanted India* (1899), by Prince Bojidar Karageorgevitch. See also the chapter on Delhi in H. G. Keene, *Hist. of Hindustan ... to the fall of the Mughol Empire* (1885). For the Delhi Durbar of 1903 see Stephen Wheeler, *Hist. of the Delhi Coronation Durbar*, compiled from official papers by order of the viceroy of India (London, 1904), which contains numerous portraits and other illustrations.

1 See the paper by V. A. Smith in the *Journal of the Royal Asiatic Soc.* (1897), p. 13.

DELIA, a festival of Apollo held every five years at the great panegyris in Delos (Homeric *Hymn to Apollo*, 147). It included athletic and musical contests, at which the prize was a branch of the sacred palm. This festival was said to have been established by Theseus on his way back from Crete. Its celebration gradually fell into abeyance and was not revived till 426 B.C., when the Athenians purified the island and took so prominent a part in the maintenance of the Delia that it came to be regarded almost as an Athenian festival (Thucydides iii. 104). Ceremonial embassies (θεωρίαι) from all the Greek cities were present.

See G. Gilbert, *Deliaca* (1869); J. A. Lebègue, *Recherches sur Délos* (1876); A. Mommsen, *Feste der Stadt Athen* (1898); E. Pfuhl, *De Atheniensium pompis sacris* (1900); G. F. Schömann, *Griechische Altertümer* (4th ed., 1897-1902); P. Stengel, *Die griechischen Kultusaltertümer* (1898); T. Homolle in Daremberg and Saglio's *Dictionnaire des antiquités*.

DELIAN LEAGUE, or CONFEDERACY OF DELOS, the name given to a confederation of Greek states under the leadership of Athens, with its headquarters at Delos, founded in 478 B.C. shortly after the final repulse of the expedition of the Persians under Xerxes I. This confederacy, which after many modifications and vicissitudes was finally broken up by the capture of Athens by Sparta in 404, was revived in 378-7 (the "Second Athenian Confederacy") as a protection against Spartan aggression, and lasted, at least formally, until the victory of Philip II. of Macedon at Chaeronea. These two confederations have an interest quite out of proportion to the significance of the detailed events which form their history. (See GREECE: *Ancient History*.) They are the first two examples of which we have detailed knowledge of a serious attempt at united action on the part of a large number of self-governing states at a relatively high level of conscious political development. The first league, moreover, in its later period affords the first example in recorded history of self-conscious imperialism in which the subordinate units enjoyed a specified local autonomy with an organized system, financial, military and judicial. The second league is further interesting as the precursor of the Achaean and Aetolian Leagues.

History.—Several causes contributed to the formation of the first Confederacy of Delos. During the 6th century B.C. Sparta had come to be regarded as the chief power, not only in the Peloponnese, but also in Greece as a whole, including the islands of the Aegean. The Persian invasions of Darius and Xerxes, with the consequent importance of maritime strength and the capacity for distant enterprise, as compared with that of

purely military superiority in the Greek peninsula, caused a considerable loss of prestige which Sparta was unwilling to recognize. Moreover, it chanced that at the time the Spartan leaders were not men of strong character or general ability. Pausanias, the victor of Plataea, soon showed himself destitute of the high qualities which the situation demanded. Personal cupidity, discourtesy to the allies, and a tendency to adopt the style and manners of oriental princes, combined to alienate from him the sympathies of the Ionian allies, who realized that, had it not been for the Athenians, the battle of Salamis would never have been even fought, and Greece would probably have become a Persian satrapy. The Athenian contingent which was sent to aid Pausanias in the task of driving the Persians finally out of the Thraceward towns was under the command of the Athenians, Aristides and Cimon, men of tact and probity. It is not, therefore, surprising that when Pausanias was recalled to Sparta on the charge of treasonable overtures to the Persians, the Ionian allies appealed to the Athenians on the grounds of kinship and urgent necessity, and that when Sparta sent out Dorcis to supersede Pausanias he found Aristides in unquestioned command of the allied fleet. To some extent the Spartans were undoubtedly relieved, in that it no longer fell to them to organize distant expeditions to Asia Minor, and this feeling was strengthened about the same time by the treacherous conduct of their king Leotychides (*q.v.*) in Thessaly. In any case the inelastic quality of the Spartan system was unable to adapt itself to the spirit of the new age. To Aristides was mainly due the organization of the new league and the adjustment of the contributions of the various allies in ships or in money. His assessment, of the details of which we know nothing, was so fair that it remained popular long after the league of autonomous allies had become an Athenian empire. The general affairs of the league were managed by a synod which met periodically in the temple of Apollo and Artemis at Delos, the ancient centre sanctified by the common worship of the Ionians. In this synod the allies met on an equality under the presidency of Athens. Among its first subjects of deliberation must have been the ratification of Aristides' assessment. Thucydides lays emphasis on the fact that in these meetings Athens as head of the league had no more than presidential authority, and the other members were called σύμμαχοι (allies), a word, however, of ambiguous meaning and capable of including both free and subject allies. The only other fact preserved by Thucydides is that Athens appointed a board called the Hellenotamiae (ταμίας, steward) to watch over and administer the treasury of the league, which for some twenty years was kept at Delos, and to receive the contributions (φόρος) of the allies who paid in money.

The league was, therefore, specifically a free confederation of autonomous Ionian cities founded as a protection against the common danger which threatened the Aegean basin, and led by Athens in virtue of her predominant naval power as exhibited in the war against Xerxes. Its organization, adopted by the common synod, was the product of the new democratic ideal embodied in the Cleisthenic reforms, as interpreted by a just and moderate exponent. It is one of the few examples of free corporate action on the part of the ancient Greek cities, whose centrifugal yearning for independence so often proved fatal to the Hellenic world. It is, therefore, a profound mistake to regard the history of the league during the first twenty years of its existence as that of an Athenian empire. Thucydides expressly describes the predominance of Athens as ἡγεμονία (leadership, headship), not as ἀρχή (empire), and the attempts made by Athenian orators during the second period of the Peloponnesian War to prove that the attitude of Athens had not altered since the time of Aristides are manifestly unsuccessful.

Of the first ten years of the league's history we know practically nothing, save that it was a period of steady, successful activity against the few remaining Persian strongholds in Thrace and the Aegean (Herod, i. 106-107, see Athens, Cimon). In these years the Athenian sailors reached a high pitch of training, and by their successes strengthened that corporate pride which had been born at Salamis. On the other hand, it naturally came to pass that certain of the allies became weary of incessant warfare and looked for a period of commercial prosperity. Athens, as the chosen leader, and supported no doubt by the synod, enforced the contributions of ships and money according to the assessment. Gradually the allies began to weary of personal service and persuaded the synod to accept a money commutation. The Ionians were naturally averse from prolonged warfare, and in the prosperity which must have followed the final rout of the Persians and the freeing of the Aegean from the pirates (a very important feature in the league's policy) a money contribution was only a trifling burden. The result was, however, extremely bad for the allies, whose status in the league necessarily became lower in relation to that of Athens, while at the same time their military and naval resources correspondingly diminished. Athens became more and more powerful, and could afford to disregard the authority of the synod. Another new feature appeared in the employment of coercion against cities which desired to secede. Athens might fairly insist that the protection of the Aegean would become impossible if some of the chief islands were liable to be used as piratical strongholds, and further that it was only right that all should contribute in some way to the security which all enjoyed. The result was that, in the cases of Naxos and Thasos, for instance, the league's resources were employed not against the Persians but against recalcitrant Greek islands, and that the Greek ideal of separate autonomy was outraged. Shortly after the capture of Naxos (*c.* 467 B.C.) Cimon proceeded with a fleet of 300 ships (only 100 from the allies) to the south-western and southern coasts of Asia Minor. Having driven the Persians out of Greek towns in Lycia and Caria, he met and routed the Persians on land and sea at the mouth of the Eurymedon in Pamphylía. In 463 after a siege of more than two years the Athenians captured Thasos, with which they had quarrelled over mining rights in the Strymon valley. It is said (Thuc. i. 101) that Thasos had appealed for aid to Sparta, and that the latter was prevented from responding only by earthquake and the Helot revolt. But this is both unproved and improbable. Sparta had so far no quarrel with Athens. Athens thus became mistress of the Aegean, while the synod at Delos had become practically, if not theoretically, powerless. It was at this time that Cimon (*q.v.*), who had striven to maintain a balance between Sparta, the chief military, and Athens, the chief naval power, was successfully attacked by Ephialtes and Pericles. During the ensuing years, apart from a brief return to the Cimonian policy, the resources of the league, or, as it has now become, the Athenian empire, were directed not so much against Persia as against Sparta, Corinth, Aegina and Boeotia. (See Athens; Sparta, &c.) A few points only need be dealt with here. The first years of the land war brought the Athenian empire to its zenith. Apart from Thessaly, it included all Greece outside the Peloponnese. At the same time, however, the Athenian expedition against the Persians in Egypt ended in a disastrous defeat, and for a time the Athenians returned to a philo-Laconian policy, perhaps under the direction of Cimon (see Cimon and Pericles). Peace was made with Sparta, and, if we are to believe 4th-century orators, a treaty, the Peace

of Callias or of Cimon, was concluded between the Great King and Athens in 449 after the death of Cimon before the walls of Citium in Cyprus. The meaning of this so-called Peace of Callias is doubtful. Owing to the silence of Thucydides and other reasons, many scholars regard it as merely a cessation of hostilities (see Cimon and Callias, where authorities are quoted). At all events, it is significant of the success of the main object of the Delian League, the Athenians resigning Cyprus and Egypt, while Persia recognized the freedom of the maritime Greeks of Asia Minor.

During this period the power of Athens over her allies had increased, though we do not know anything of the process by which this was brought about. Chios, Lesbos and Samos alone furnished ships; all the rest had commuted for a money payment. This meant that the synod was quite powerless. Moreover in 454 (probably) the changed relations were crystallized by the transference (proposed by the Samians) of the treasury to Athens (*Corp. Inscr. Attic.* i. 260). Thus in 448 B.C. Athens was not only mistress of a maritime empire, but ruled over Megara, Boeotia, Phocis, Locris, Achaea and Troezen, *i.e.* over so-called allies who were strangers to the old pan-Ionian assembly and to the policy of the league, and was practically equal to Sparta on land. An important event must be referred probably to the year 451,—the law of Pericles, by which citizenship (including the right to vote in the Ecclesia and to sit on paid juries) was restricted to those who could prove themselves the children of an Athenian father and mother (ἐξ ἀμφοῖν ἀστοῖν). This measure must have had a detrimental effect on the allies, who thus saw themselves excluded still further from recognition as equal partners in a league (see Pericles). The natural result of all these causes was that a feeling of antipathy rose against Athens in the minds of those to whom autonomy was the breath of life, and the fundamental tendency of the Greeks to disruption was soon to prove more powerful than the forces at the disposal of Athens. The first to secede were the land powers of Greece proper, whose subordination Athens had endeavoured to guarantee by supporting the democratic parties in the various states. Gradually the exiled oligarchs combined; with the defeat of Tolmides at Coroneia, Boeotia was finally lost to the empire, and the loss of Phocis, Locris and Megara was the immediate sequel. Against these losses the retention of Euboea, Nisaea and Pegae was no compensation; the land empire was irretrievably lost.

The next important event is the revolt of Samos, which had quarrelled with Miletus over the city of Priene. The Samians refused the arbitration of Athens. The island was conquered with great difficulty by the whole force of the league, and from the fact that the tribute of the Thracian cities and those in Hellespontine district was increased between 439 and 436 we must probably infer that Athens had to deal with a widespread feeling of discontent about this period. It is, however, equally noticeable on the one hand that the main body of the allies was not affected, and on the other that the Peloponnesian League on the advice of Corinth officially recognized the right of Athens to deal with her rebellious subject allies, and refused to give help to the Samians.

The succeeding events which led to the Peloponnesian War and the final disruption of the league are discussed in other articles. (See Athens: *History*, and Peloponnesian War.) Two important events alone call for special notice. The first is the raising of the allies' tribute in 425 B.C. by a certain Thudippus, presumably a henchman of Cleon. The fact, though not mentioned by Thucydides, was inferred from Aristophanes (*Wasps*, 660), Andocides (*de Pace*, § 9), Plutarch (*Aristides*, c. 24), and pseudo-Andocides (*Alcibiad.* 11); it was proved by the discovery of the assessment list of 425-4 (Hicks and Hill, *Inscrip.* 64). The second event belongs to 411, after the failure of the Sicilian expedition. In that year the tribute of the allies was commuted for a 5% tax on all imports and exports by sea. This tax, which must have tended to equalize the Athenian merchants with those of the allied cities, probably came into force gradually, for beside the new collectors called πορισταί we still find Hellenotamiae (*C.I.A.* iv. [i.] p. 34).

The Tribute.—Only a few problems can be discussed of the many which are raised by the insufficient and conflicting evidence at our disposal. In the first place there is the question of the tribute. Thucydides is almost certainly wrong in saying that the amount of the original tribute was 460 talents (about £106,000); this figure cannot have been reached for at least twelve, probably twenty years, when new members had been enrolled (Lycia, Caria, Eion, Lampsacus). Similarly he is probably wrong, or at all events includes items of which the tribute lists take no account, when he says that it amounted to 600 talents at the beginning of the Peloponnesian War. The moderation of the assessment is shown not only by the fact that it was paid so long without objection, but also by the individual items. Even in 425 Naxos and Andros paid only 15 talents, while Athens had just raised an *eisphora* (income tax) from her own citizens of 200 talents. Moreover it would seem that a tribute which yielded less than the 5% tax of 411 could not have been unreasonable.

The number of tributaries is given by Aristophanes as 1000, but this is greatly in excess of those named in the tribute lists. Some authorities give 200; others put it as high as 290. The difficulty is increased by the fact that in some cases several towns were grouped together in one payment (συντελεῖς). These were grouped into five main geographical divisions (from 443 to 436; afterwards four, Caria being merged in Ionia). Each division was represented by two elective assessment commissioners (τακταί), who assisted the Boulē at Athens in the quadrennial division of the tribute. Each city sent in its own assessment before the τακταί, who presented it to the Boulē. If there was any difference of opinion the matter was referred to the Ecclesia for settlement. In the Ecclesia a private citizen might propose another assessment, or the case might be referred to the law courts. The records of the tribute are preserved in the so-called quota lists, which give the names of the cities and the proportion, one-sixtieth, of their several tributes, which was paid to Athens. No tribute was paid by members of a *cleruchy* (*q.v.*), as we find from the fact that the tribute of a city always decreased when a cleruchy was planted in it. This highly organized financial system must have been gradually evolved, and no doubt reached its perfection only after the treasury was transferred to Athens.

Government and Jurisdiction.—There is much difference of opinion among scholars regarding the attitude of imperial Athens towards her allies. Grote maintained that on the whole the allies had little ground for complaint; but in so doing he rather seems to leave out of account the Greek's dislike of external discipline. The very fact that the hegemony had become an empire was enough to make the new system highly offensive to the allies. No very strong argument can be based on the paucity of actual revolts. The indolent Ionians had seen the result of secession at Naxos and rebellion at Thasos; the Athenian fleet was perpetually on guard in the Aegean. On the other hand among the mainland cities revolt was frequent; they were ready to rebel καὶ

παρὰ δύναμιν. Therefore, even though Athenian domination may have been highly salutary in its effects, there can be no doubt that the allies did not regard it with affection.

To judge only by the negative evidence of the decree of Aristoteles which records the terms of alliance of the second confederacy (below), we gather that in the later period at least of the first league's history the Athenians had interfered with the local autonomy of the allies in various ways—an inference which is confirmed by the terms of "alliance" which Athens imposed on Erythrae, Chalcis and Miletus. Though it appears that Athens made individual agreements with various states, and therefore that we cannot regard as general rules the terms laid down in those which we possess, it is undeniable that the Athenians planted garrisons under permanent Athenian officers (φρούραρχοι) in some cities. Moreover the practice among Athenian settlers of acquiring land in the allied districts must have been vexatious to the allies, the more so as all important cases between Athenians and citizens of allied cities were brought to Athens. Even on the assumption that the Athenian dicasteries were scrupulously fair in their awards, it must have been peculiarly galling to the self-respect of the allies and inconvenient to individuals to be compelled to carry cases to Athens and Athenian juries. Furthermore we gather from the Aristoteles inscription and from the 4th-century orators that Athens imposed democratic constitutions on her allies; indeed Isocrates (*Paneg.*, 106) takes credit for Athens on this ground, and the charter of Erythrae confirms the view (cf. Arist. *Polit.*, viii., vi. 9 1307 b 20; Thuc. viii. 21, 48, 64, 65). Even though we admit that Chios, Lesbos and Samos (up to 440) retained their oligarchic governments and that Selymbria, at a time (409 B.C.) when the empire was *in extremis*, was permitted to choose its own constitution, there can be no doubt that, from whatever motive and with whatever result, Athens did exercise over many of her allies an authority which extended to the most intimate concerns of local administration.

Thus the great attempt on the part of Athens to lead a harmonious league of free Greek states for the good of Hellas degenerated into an empire which proved intolerable to the autonomous states of Greece. Her failure was due partly to the commercial jealousy of Corinth working on the dull antipathy of Sparta, partly to the hatred of compromise and discipline which was fatally characteristic of Greece and especially of Ionian Greece, and partly also to the lack of tact and restraint shown by Athens and her representatives in her relations with the allies.

The Second League.—The conditions which led to the second Athenian or Delian Confederacy were fundamentally different, not only in virtue of the fact that the allies had learned from experience the dangers to which such a league was liable, but because the enemy was no longer an oriental power of whose future action there could be no certain anticipation, but Sparta, whose ambitious projects since the fall of Athens had shown that there could be no safety for the smaller states save in combination.

There can be no reasonable doubt that as soon as the Athenians began to recover from the paralysing effect of the victory of Lysander and the internal troubles in which they were involved by the government of the Thirty, their thoughts turned to the possibility of recovering their lost empire. The first step in the direction was the recovery of their sea-power, which was effected by the victory of Conon at Cnidus (August 394 B.C.). Gradually individual cities which had formed part of the Athenian empire returned to their alliance with Athens, until the Spartans had lost Rhodes, Cos, Nisyrus, Teos, Chios, Mytilene, Ephesus, Erythrae, Lemnos, Imbros, Scyros, Eretria, Melos, Cythera, Carpathus and Delos. Sparta had only Sestos and Abydos of all that she had won by the battle of Aegospotami. At the same time no systematic constructive attempt at a renewal of empire can as yet be detected. Athenian relations were with individual states only, and the terms of alliance were various. Moreover, whereas Persia had been for several years aiding Athens against Sparta, the revolt of the Athenian ally Evagoras (*q.v.*) of Cyprus set them at enmity, and with the secession of Ephesus, Cnidus and Samos in 391 and the civil war in Rhodes, the star of Sparta seemed again to be in the ascendant. But the whole position was changed by the successes of Thrasybulus, who brought over the Odrysian king Medocus and Seuthes of the Propontis to the Athenian alliance, set up a democracy in Byzantium and reimposed the old 10% duty on goods from the Black Sea. Many of the island towns subsequently came over, and from inscriptions at Clazomenae (*C.I.A.* ii. 14*b*) and Thasos (*C.I.A.* iv. 11*b*) we learn that Thrasybulus evidently was deliberately aiming at a renewal of the empire, though the circumstances leading to his death at Aspendus when seeking to raise money suggest that he had no general backing in Athens.

The peace of Antalcidas or the King's Peace (see ANTALCIDAS; SPARTA) in 386 was a blow to Athens in the interests of Persia and Sparta. Antalcidas compelled the Athenians to give their assent to it only by making himself master of the Hellespont by stratagem with the aid of Dionysius the Elder of Syracuse. By this peace all the Greek cities on the mainland of Asia with the islands of Cyprus and Clazomenae were recognized as Persian, all other cities except Imbros, Lemnos and Scyros as autonomous. Directly, this arrangement prevented an Athenian empire; indirectly, it caused the sacrificed cities and their kinsmen on the islands to look upon Athens as their protector. The gross selfishness of the Spartans, herein exemplified, was emphasized by their capture of the Theban citadel, and, after their expulsion, by the raid upon Attica in time of peace by the Spartan Sphodrias, and his immunity from punishment at Sparta (summer of 378 B.C.). The Athenians at once invited their allies to a conference, and the Second Athenian Confederacy was formed in the archonship of Nausinicus on the basis of the famous decree of Aristoteles. Those who attended the conference were probably Athens, Chios, Mytilene, Methymna, Rhodes, Byzantium, Thebes, the latter of which joined Athens soon after the Sphodrias raid. In the spring of 377 invitations were sent out to the maritime cities. Some time in that year Tenedos, Chios, Chalcis in Euboea, and probably the Euboean cities Eretria, Carystus and Arethusa gave in their adherence, followed by Perinthus, Peparethus, Sciathus and other maritime cities.

At this point Sparta was roused to a sense of the significance of the new confederacy, and the Athenian corn supply was threatened by a Spartan fleet of sixty triremes. The Athenians immediately fitted out a fleet under Chabrias, who gained a decisive victory over the Spartans between Naxos and Paros (battle of Naxos 376 B.C.), both of which were added to the league. Proceeding northwards in 375 Chabrias brought over a large number of the Thraceward towns, including Abdera, Thasos and Samothrace. It is interesting to notice that a garrison was placed in Abdera in direct contravention of the terms of the new confederacy (Meyer, *Gesch. d. Alt.*, v. 394). About the same time the successes of Timotheus in the west resulted in the addition to

the league of Corcyra and the cities of Cephallenia, and his moderation induced the Acarnanians and Alcetas, the Molossian king, to follow their example. Once again Sparta sent out a fleet, but Timotheus in spite of financial embarrassment held his ground. By this time, however, the alliance between Thebes and Athens was growing weaker, and Athens, being short of money, concluded a peace with Sparta (probably in July 374), by which the peace of Antalcidas was confirmed and the two states recognized each other as mistress of sea and land respectively. Trouble, however, soon arose over Zacynthus, and the Spartans not only sent help to the Zacynthian oligarchs but even besieged Corcyra (373). Timotheus was sent to relieve the island, but shortness of money compelled him to search for new allies, and he spent the summer of 373 in persuading Jason of Pherae (if he had not already joined), and certain towns in Thrace, the Chersonese, the Propontis and the Aegean to enrol themselves. This delay in sending help to Corcyra was rightly or wrongly condemned by the Athenians, who dismissed Timotheus in favour of Iphicrates. The expedition which followed produced negative successes, but the absence of any positive success and the pressure of financial difficulty, coupled with the defection of Jason (probably before 371), and the high-handed action of Thebes in destroying Plataea (373), induced Athens to renew the peace with Sparta which Timotheus had broken. With the support of Persia an agreement was made by a congress at Sparta on the basis of the autonomy of the cities, Amphipolis and the Chersonese being granted to Athens. The Thebans at first accepted the terms, but on the day after, realizing that they were thus balked of their pan-Boeotian ambition, withdrew and finally severed themselves from the league.

The peace of 371 may be regarded as the conclusion of the first distinct period in the league's existence. The original purpose of the league—the protection of the allies from the ambitions of Sparta—was achieved. Athens was recognized as mistress of the sea; Sparta as the chief land power. The inherent weakness of the coalition had, however, become apparent. The enthusiasm of the allies (numbering about seventy) waned rapidly before the financial exigencies of successive campaigns, and it is abundantly clear that Thebes had no interest save the extension of her power in Boeotia. Though her secession, therefore, meant very little loss of strength, there were not wanting signs that the league was not destined to remain a power in the land.

The remaining history may be broken up into two periods, the first from 371 to 357, the second from 357 to 338. Throughout these two periods, which saw the decline and final dissolution of the alliance, there is very little specific evidence for its existence. The events seem to belong to the histories of the several cities, and examples of corporate action are few and uncertain. None the less the known facts justify a large number of inferences as to the significance of events which are on the surface merely a part of the individual foreign policy of Athens.

Period 371-357.—The first event in this period was the battle of Leuctra (July 371), in which, no doubt to the surprise of Athens, Thebes temporarily asserted itself as the chief land power in Greece. To counterbalance the new power Athens very rashly plunged into Peloponnesian politics with the ulterior object of inducing the states which had formerly recognized the hegemony of Sparta to transfer their allegiance to the Delian League. It seems that all the states adopted this policy with the exception of Sparta (probably) and Elis. The policy of Athens was mistaken for two reasons: (1) Sparta was not entirely humiliated, and (2) alliance with the land powers of Peloponnese was incalculably dangerous, inasmuch as it involved Athens in enterprises which could not awake the enthusiasm of her maritime allies. This new coalition naturally alarmed Sparta, which at once made overtures to Athens on the ground of their common danger from Thebes. The alliance was concluded in 369. About the same time Iphicrates was sent to take possession of Amphipolis according to the treaty of 371. Some success in Macedonia roused the hostility of Thebes, and the subsequent attempts on Amphipolis caused the Chalcidians to declare against the league. It would appear that the old suspicion of the allies was now thoroughly awakened, and we find Athens making great efforts to conciliate Mytilene by honorific decrees (Hicks and Hill, 109). This suspicion, which was due primarily, no doubt, to the agreement with Sparta, would find confirmation in the subsequent exchange of compliments with Dionysius I. of Syracuse, Sparta's ally, who with his sons received the Athenian citizenship. It is not clear that the allies officially approved this new friendship; it is certain that it was actually distasteful to them. The same dislike would be roused by the Athenian alliance with Alexander of Pherae (368-367). The maritime allies naturally had no desire to be involved in the quarrels of Sicily, Thessaly and the Peloponnese.

In 367 Athens and Thebes sent rival ambassadors to Persia, with the result that Athens was actually ordered to abandon her claim to Amphipolis, and to remove her navy from the high seas. The claim to Amphipolis was subsequently affirmed, but the Greek states declined to obey the order of Persia. In 366 Athens lost Oropus, a blow which she endeavoured to repair by forming an alliance with Arcadia and by an attack on Corinth. At the same time certain of the Peloponnesian states made peace with Thebes, and some hold that Athens joined this peace (Meyer, *Gesch. d. Alt.* v. 449). Timotheus was sent in 366-365 to make a demonstration against Persia. Finding Samos in the hands of Cyprothemis, a servant of the satrap Tigranes, he laid siege to it, captured it after a ten months' siege and established a cleruchy. Though Samos was not apparently one of the allies, this latter action could not but remind the allies of the very dangers which the second confederacy had set out to avoid.

The next important event was the serious attempt on the part of Epaminondas to challenge the Athenian naval supremacy. Though Timotheus held his ground the confederacy was undoubtedly weakened. In 362 Athens joined in the opposition to the Theban expedition which ended in the battle of Mantineia (July). In the next year the Athenian generals failed in the north in their attempt to control the Hellespont. In Thessaly Alexander of Pherae became hostile and after several successes even attacked the Peiraeus. Chares was ordered to make reprisals, but instead sailed to Corcyra, where he made the mistake of siding with the oligarchs. The last event of the period was a success, the recovery of Euboea (357), which was once more added to the league.

During these fourteen years the policy of Athens towards her maritime allies was, as we have seen, shortsighted and inconsistent. Alliances with various land powers, and an inability to understand the true relations which alone could unite the league, combined to alienate the allies, who could discover no reason for the expenditure of their contributions on protecting Sparta or Corinth against Thebes. The Συνέδριον of the league is found taking action in several instances, but there is evidence (cf. the expedition of

Epaminondas in 363) that there was ground for suspecting disloyalty in many quarters. On the other hand, though the Athenian fleet became stronger and several cities were captured, the league itself did not gain any important voluntary adherents. The generals were compelled to support their forces by plunder or out of their private resources, and, frequently failing, diverted their efforts from the pressing needs of the allies to purely Athenian objects.

Period 357-338.—The latent discontent of the allies was soon fanned into hostility by the intrigues of Mausolus, prince of Cardia, who was anxious to extend his kingdom. Chios, Rhodes, Cos, Byzantium, Erythrae and probably other cities were in revolt by the spring of 356, and their attacks on loyal members of the confederacy compelled Athens to take the offensive. Chabrias had already been killed in an attack on Chios in the previous autumn, and the fleet was under the command of Timotheus, Iphicrates and Chares, who sailed against Byzantium. The enemy sailed north from Samos and in a battle off Embata (between Erythrae and Chios) defeated Chares, who, without the consent of his colleagues, had ventured to engage them in a storm. The more cautious generals were accused of corruption in not supporting Chares. Iphicrates was acquitted and Timotheus condemned. Chares sought to replenish his resources by aiding the Phrygian satrap Artabazus against Artaxerxes Ochus, but a threat from the Persian court caused the Athenians to recall him, and peace was made by which Athens recognized the independence of the revolted towns. The league was further weakened by the secession of Corcyra, and by 355 was reduced to Athens, Euboea and a few islands. By this time, moreover, Philip II. of Macedon had begun his career of conquest, and had shattered an embryonic alliance between the league and certain princes of Thrace (Cetriporis), Paeonia (Lyppeius) and Illyria (Grabus). In 355 his advance temporarily ceased, but, as we learn from Isocrates and Xenophon, the financial exhaustion of the league was such that its destruction was only a matter of time. Resuming operations in 354, Philip, in spite of temporary checks at the hands of Chares, and the spasmodic opposition of a few barbarian chiefs, took from the league all its Thracian and Macedonian cities (Abdera, Maronea, Neapolis, Methone.) In 352-351 Philip actually received help from former members of the confederacy. In 351 Charidemus, Chares and Phocion were sent to oppose him, and we find that the contributions of the Lesbian cities were assigned to them for supplies, but no successes were gained. In 349 Euboea and Olynthus were lost to the league, of which indeed nothing remained but an empty form, in spite of the facts that the expelled Olynthians appealed to it in 348 and that Mytilene rejoined in 347. In 346 the peace of Philocrates was made between the league and Philip on terms which were accepted by the Athenian Boulē. It is very remarkable that, in spite of the powerlessness of the confederacy, the last recorded event in its history is the steady loyalty of Tenedos, which gave money to Athens about 340 (Hicks and Hill, 146). The victory of Philip at Chaeronea in 338 finally destroyed the league.

In spite of the precautions taken by the allies to prevent the domination of Athens at their expense, the policy of the league was almost throughout directed rather in the interests of Athens. Founded with the specific object of thwarting the ambitious designs of Sparta, it was plunged by Athens into enterprises of an entirely different character which exhausted the resources of the allies without benefiting them in any respect. There is no doubt that, with very few exceptions, the cities were held to their allegiance solely by the superior force of the Athenian navy. The few instances of its action show that the Συνέδριον was practically only a tool in the hands of Athens.

AUTHORITIES.—*The First League.*—The general histories of Greece, especially those of A. Holm (Eng. trans., London, 1894), G. Busolt (2nd ed., Gotha, 1893), J. Beloch (Strassburg, 1893 foll.), and G. Grote (the one-vol. ed. of 1907 has some further notes on later evidence). E. Meyer's *Gesch. des Altertums* (Stuttgart, 1892 foll.) and *Forschungen* (Halle, 1892 foll.) are of the greatest value. For inscriptions, G. F. Hill, *Sources of Greek History*, 478-431 (2nd ed., 1907); E. L. Hicks and G. F. Hill, *Greek Hist. Inscr.* (Oxford, 1901). On the tribute see also U. Köhler in *Abhandlungen d. Berliner Akademie* (1869) and U. Pedroli, "I Tributi degli alleati d' Atene" in Beloch's *Studi di storia antica*. See also articles ARISTIDES; THEMISTOCLES; PERICLES; CIMON, &c., and GREECE: *History*, with works quoted. For the last years of the league see also PELOPONNESIAN WAR.

The Second League.—The chief modern works are G. Busolt, "Der zweite athenische Bund" in *Neue Jahrbücher für classische Philologie* (supp. vol. vii., 1873-1875, pp. 641-866), and F. H. Marshall, *The Second Athenian Confederacy* (1905), one of the Cambridge Historical Essays (No. xiii.). The latter is based on Busolt's monograph and includes subsequent epigraphic evidence, with a full list of authorities. For inscriptions see Hicks and Hill, *op. cit.*, and the *Inscriptiones Atticae*, vol. ii. pt. 5. The meagre data given by ancient writers are collected by Busolt and Marshall.

(J. M. M.)

DELIBES, CLÉMENT PHILIBERT LÉO (1836-1891), French composer, was born at Saint Germain du Val on the 21st of February 1836. He studied at the Paris Conservatoire under Adolphe Charles Adam, through whose influence he became accompanist at the Théâtre Lyrique. His first essay in dramatic composition was his *Deux sous de charbon* (1853), and during several years he produced a number of operettas. His cantata *Alger* was heard at the Paris opera in 1865. Having become second chorus master at the Grand Opéra, he wrote the music of a ballet entitled *La Source* for this theatre, in collaboration with Minkous, a Polish composer. La Source was produced with great success in 1866. The composer returned to the operetta style with *Malbrouk s'en va-t-en guerre*,—written in collaboration with Georges Bizet, Émile Jonas and Legouix, and given at the Théâtre de l'Athénée in 1867. Two years later came *L'Écossais de Chatou*, a one-act piece, and *La Cour du roi Pétaud*, a three-act opera-bouffe. The ballet *Coppélia* was produced at the Grand Opéra on the 25th of May 1870 with enormous success.

Delibes gave up his post as second chorus master at the Grand Opéra in 1872 when he married the daughter of Mademoiselle Denain, formerly an actress at the Comédie Française. In this year he published a collection of graceful melodies including *Myrto*, *Les Filles de Cadiz*, *Bonjour*, *Suzon* and others. His first

important dramatic work was *Le Roi l'a dit*, a charming comic opera, produced on the 24th of May 1873 at the Opéra Comique. Three years later, on the 14th of June 1876, *Sylvia*, a ballet in three acts, one of the composer's most delightful works, was produced at the Grand Opéra. This was followed by *La Mort d'Orphée*, a grand scena produced at the Trocadéro concerts in 1878; by *Jean de Nivelle*, a three-act opera brought out at the Opéra Comique on the 8th of March 1880; and by *Lakmé*, an opera in three acts produced at the same theatre on the 14th of April 1883. Lakmé has remained his most popular opera. The composer died in Paris on the 16th of January 1891, leaving *Kassya*, a four-act opera, in an unfinished state. This work was completed by E. Guiraud, and produced at the Opéra Comique on the 21st of March 1893. In 1877 Delibes became a chevalier of the Legion of Honour; in 1881 he became a professor of advanced composition at the Conservatoire; in 1884 he took the place of Victor Massé at the Institut de France.

Leo Delibes was a typically French composer. His music is light, graceful and refined. He excelled in ballet music, and *Sylvia* may well be considered a masterpiece. His operas are constructed on a conventional pattern. The harmonic texture, however, is modern, and the melodic invention abundant, while the orchestral treatment is invariably excellent.

DELILAH, in the Bible, the heroine of Samson's last love-story and the cause of his downfall (Judg. xvi.). She was a Philistine of Sorek (mod. Sūrīk), west of Zorah, and when her countrymen offered her an enormous bribe to betray him, she set to work to find out the source of his strength. Thrice Samson scoffingly told her how he might be bound, and thrice he readily broke the bonds with which she had fettered him in his sleep; seven green bow-strings, new ropes, and even the braiding of his hair into the frame of the loom failed to secure him. At length he disclosed the secret of his power. Delilah put him to sleep upon her lap, called in a man to shave off his seven locks, and this time he was easily captured. See Samson.

DELILLE, JACQUES (1738-1813), French poet, was born on the 22nd of June 1738 at Aigue-Perse in Auvergne. He was an illegitimate child, and was descended by his mother from the chancellor De l'Hôpital. He was educated at the college of Lisieux in Paris and became an elementary teacher. He gradually acquired a reputation as a poet by his epistles, in which things are not called by their ordinary names but are hinted at by elaborate periphrases. Sugar becomes "le miel américain que du suc des roseaux exprima l'Africain." The publication (1769) of his translation of the *Georgics* of Virgil made him famous. Voltaire recommended the poet for the next vacant place in the Academy. He was at once elected a member, but was not admitted until 1774 owing to the opposition of the king, who alleged that he was too young. In his *Jardins, ou l'art d'embellir les paysages* (1782) he made good his pretensions as an original poet. In 1786 he made a journey to Constantinople in the train of the ambassador M. de Choiseul-Gouffier.

Delille had become professor of Latin poetry at the Collège da France, and abbot of Saint-Sévérin, when the outbreak of the Revolution reduced him to poverty. He purchased his personal safety by professing his adherence to revolutionary doctrine, but eventually quitted Paris, and retired to St Dié, where he completed his translation of the *Aeneid*. He emigrated first to Basel and then to Glairesse in Switzerland. Here he finished his *Homme des champs*, and his poem on the *Trois règnes de la nature*. His next place of refuge was in Germany, where he composed his *La Pitié*; and finally, he passed some time in London, chiefly employed in translating *Paradise Lost*. In 1802 he was able to return to Paris, where, although nearly blind, he resumed his professorship and his chair at the Academy, but lived in retirement. He fortunately did not outlive the vogue of the descriptive poems which were his special province, and died on the 1st of May 1813.

Delille left behind him little prose. His preface to the translation of the *Georgics* is an able essay, and contains many excellent hints on the art and difficulties of translation. He wrote the article "La Bruyère" in the *Biographie universelle*. The following is the list of his poetical works:—*Les Géorgiques de Virgile, traduites en vers français* (Paris, 1769, 1782, 1785, 1809); *Les Jardins*, en quatre chants (1780; new edition, Paris, 1801); *L'Homme des champs, ou les Géorgiques françaises* (Strassburg, 1802); *Poésies fugitives* (1802); *Dithyrambe sur l'immortalité de l'âme, suivi du passage du Saint Gothard*, poëme traduit de l'Anglais de Madame la duchesse de Devonshire (1802); *La Pitié*, poëme en quatre chants (Paris, 1802); *L'Énéide de Virgile, traduite en vers français* (4 vols., 1804); *Le Paradis perdu* (3 vols., 1804); *L'Imagination*, poëme en huit chants (2 vols., 1806); *Les trois règnes de la nature* (2 vols., 1808); *La Conversation* (1812). A collection given under the title of *Poésies diverses* (1801) was disavowed by Delille.

His *Œuvres* (16 vols.) were published in 1824. See Sainte-Beuve, *Portraits littéraires*, vol. ii.

DELIRIUM (a Latin medical term for madness, from *delirare*, to be mad, literally to wander from the *lira*, or furrow), a temporary form of brain disorder, generally occurring in connexion with some special form of bodily disease. It may vary in intensity from slight and occasional wandering of the mind and incoherence of expression, to fixed delusions and violent maniacal excitement, and again it may be associated with more or less of coma or insensibility. (See Insanity, and Neuropathology.) Delirium is apt to occur in most diseases of

an acute nature, such as fevers or inflammatory affections, in injuries affecting the brain, in blood diseases, in conditions of exhaustion, and as the result of the action of certain specific poisons, such as opium, Indian hemp, belladonna, chloroform and alcohol.

Delirium tremens is one of a train of symptoms of what is termed in medical nomenclature acute alcoholism, or excessive indulgence in alcohol. It must, however, be observed that this disorder, although arising in this manner, rarely comes on as the result of a single debauch in a person unaccustomed to the abuse of stimulants, but generally occurs in cases where the nervous system has been already subjected for a length of time to the poisonous action of alcohol, so that the complaint might be more properly regarded as acute supervening on chronic alcoholism. It is equally to be borne in mind that many habitual drunkards never suffer from delirium tremens.

It was long supposed, and is indeed still believed by some, that delirium tremens only comes on when the supply of alcohol has been suddenly cut off; but this view is now generally rejected, and there is abundant evidence to show that the attack comes on while the patient is still continuing to drink. Even in those cases where several days have elapsed between the cessation from drinking and the seizure, it will be found that in the interval the premonitory symptoms of delirium tremens have shown themselves, one of which is aversion to drink as well as food—the attack being in most instances preceded by marked derangement of the digestive functions. Occasionally the attack is precipitated in persons predisposed to it by the occurrence of some acute disease, such as pneumonia, by accidents, such as burns, also by severe mental strain, and by the deprivation of food, even where the supply of alcohol is less than would have been likely to produce it otherwise. Where, on the other hand, the quantity of alcohol taken has been very large, the attack is sometimes ushered in by fits of an epileptiform character.

One of the earliest indications of the approaching attack of delirium tremens is sleeplessness, any rest the patient may obtain being troubled by unpleasant or terrifying dreams. During the day there is observed a certain restlessness and irritability of manner, with trembling of the hands and a thick or tremulous articulation. The skin is perspiring, the countenance oppressed-looking and flushed, the pulse rapid and feeble, and there is evidence of considerable bodily prostration. These symptoms increase each day and night for a few days, and then the characteristic delirium is superadded. The patient is in a state of mental confusion, talks incessantly and incoherently, has a distressed and agitated or perplexed appearance, and a vague notion that he is pursued by some one seeking to injure him. His delusions are usually of transient character, but he is constantly troubled with visual hallucinations in the form of disagreeable animals or insects which he imagines he sees all about him. He looks suspiciously around him, turns over his pillows, and ransacks his bedclothes for some fancied object he supposes to be concealed there. There is constant restlessness, a common form of delusion being that he is not in his own house, but imprisoned in some apartment from which he is anxious to escape to return home. In these circumstances he is ever wishing to get out of bed and out of doors, and, although in general he may be persuaded to return to bed, he is soon desiring to get up again. The trembling of the muscles from which the name of the disease is derived is a prominent but not invariable symptom. It is most marked in the muscles of the hands and arms and in the tongue. The character of the delirium is seldom wild or noisy, but is much more commonly a combination of busy restlessness and indefinite fear. When spoken to, the patient can answer correctly enough, but immediately thereafter relapses into his former condition of incoherence. Occasionally maniacal symptoms develop themselves, the patient becoming dangerously violent, and the case thus assuming a much graver aspect than one of simple delirium tremens.

In most cases the symptoms undergo abatement in from three to six days, the cessation of the attack being marked by the occurrence of sound sleep, from which the patient awakes in his right mind, although in a state of great physical prostration, and in great measure if not entirely oblivious of his condition during his illness.

Although generally the termination of an attack of delirium tremens is in recovery, it occasionally proves fatal by the supervention of coma and convulsions, or acute mania, or by exhaustion, more especially when any acute bodily disease is associated with the attack. In certain instances delirium tremens is but the beginning of serious and permanent impairment of intellect, as is not infrequently observed in confirmed drunkards who have suffered from frequent attacks of this disease. The theory once widely accepted, that delirium tremens was the result of the too sudden breaking off from indulgence in alcohol, led to its treatment by regular and often large doses of stimulants, a practice fraught with mischievous results, since however much the delirium appeared to be thus calmed for the time, the continuous supply of the poison which was the original source of the disease inflicted serious damage upon the brain, and led in many instances to the subsequent development of insanity. The former system of prescribing large doses of opium, with the view of procuring sleep at all hazards, was no less pernicious. In addition to these methods of treatment, mechanical restraint of the patient was the common practice.

The views of the disease which now prevail, recognizing the delirium as the effect at once of the poisonous action of alcohol upon the brain and of the want of food, encourage reliance to be placed for its cure upon the entire withdrawal, in most instances, of stimulants, and the liberal administration of light nutriment, in addition to quietness and gentle but firm control, without mechanical restraint. In mild attacks this is frequently all that is required. In more severe cases, where there is great restlessness, sedatives have to be resorted to, and many substances have been recommended for the purpose. Opiates administered in small quantity, and preferably by hypodermic injection, are undoubtedly of value; and chloral, either alone or in conjunction with bromide of potassium, often answers even better. Such remedies, however, should be administered with great caution, and only under medical supervision.

Stimulants may be called for where the delirium assumes the low or adynamic form, and the patient tends to sink from exhaustion, or when the attack is complicated with some other disease. Such cases are, however, in the highest degree exceptional, and do not affect the general principle of treatment already referred to, which inculcates the entire withdrawal of stimulants in the treatment of ordinary attacks of delirium tremens.

DELISLE, JOSEPH NICOLAS (1688-1768), French astronomer, was born at Paris on the 4th of April 1688. Attracted to astronomy by the solar eclipse of the 12th of May 1706, he obtained permission in 1710 to lodge in the dome of the Luxembourg, procured some instruments, and there observed the total eclipse of the 22nd of May 1724. He proposed in 1715 the "diffraction-theory" of the sun's corona, visited England and was received into the Royal Society in 1724, and left Paris for St Petersburg on a summons from the empress Catherine, towards the end of 1725. Having founded an observatory there, he returned to Paris in 1747, was appointed geographical astronomer to the naval department with a salary of 3000 livres, and installed an observatory in the Hôtel Cluny. Charles Messier and J. J. Lalande were among his pupils. He died of apoplexy at Paris on the 12th of September 1768. Delisle is chiefly remembered as the author of a method for observing the transits of Venus and Mercury by instants of contacts. First proposed by him in a letter to J. Cassini in 1743, it was afterwards perfected, and has been extensively employed. As a preliminary to the transit of Mercury in 1743, which he personally observed, he issued a map of the world showing the varied circumstances of its occurrence. Besides many papers communicated to the academy of sciences, of which he became a member in 1714, he published *Mémoires pour servir à l'histoire et au progrès de l'astronomie* (St Petersburg, 1738), in which he gave the first method for determining the heliocentric co-ordinates of sun-spots; *Mémoire sur les nouvelles découvertes au nord de la mer du sud* (Paris, 1752), &c.

See *Mémoires de l'acad. des sciences* (Paris, 1768), *Histoire*, p. 167 (G. de Fouchy); J. B. J. Delambre, *Hist. de l'astronomie au XVIII^e siècle*, pp. 319, 533; Max. Marie, *Hist. des sciences*, vii. 254; Lalande, Bibl. astr. p. 385; and *Le Nécrologe des hommes célèbres de France* (1770). The records of Delisle's observations at St Petersburg are preserved in manuscript at the Pulkowa observatory. A report upon them was presented to the St Petersburg academy of sciences by O. Struve in 1848, and those relating to occultations of the Pleiades were discussed by Carl Linsser in 1864. See also S. Newcomb, *Washington Observations* for 1875, app. ii. pp. 176-189.

(A. M. C.)

DELISLE, LÉOPOLD VICTOR (1826-), French bibliophile and historian, was born at Valognes (Manche) on the 24th of October 1826. At the École des Chartes, where his career was remarkably brilliant, his valedictory thesis was an *Essai sur les revenus publics en Normandie au XII^e siècle* (1849), and it was to the history of his native province that he devoted his early works. Of these the *Études sur la condition de la classe agricole et l'état de l'agriculture en Normandie au moyen âge* (1851), condensing an enormous mass of facts drawn from the local archives, was reprinted in 1905 without change, and remains authoritative. In November 1852 he entered the manuscript department of the Bibliothèque Impériale (Nationale), of which in 1874 he became the official head in succession to Jules Taschereau. He was already known as the compiler of several invaluable inventories of its manuscripts. When the French government decided on printing a general catalogue of the printed books in the Bibliothèque, Delisle became responsible for this great undertaking and took an active part in the work; in the preface to the first volume (1897) he gave a detailed history of the library and its management. Under his administration the library was enriched with numerous gifts, legacies and acquisitions, notably by the purchase of a part of the Ashburnham MSS. Delisle proved that the bulk of the MSS. of French origin which Lord Ashburnham had bought in France, particularly those bought from the bookseller Barrois, had been purloined by Count Libri, inspector-general of libraries under King Louis Philippe, and he procured the repurchase of the MSS. for the library, afterwards preparing a catalogue of them entitled *Catalogue des MSS. des fonds Libri et Barrois* (1888), the preface of which gives the history of the whole transaction. He was elected member of the Académie des Inscriptions et Belles Lettres in 1859, and became a member of the staff of the *Recueil des historiens de la France*, collaborating in vols. xxii. (1865) and xxiii. (1876) and editing vol. xxiv. (1904), which is valuable for the social history of France in the 13th century. The jubilee of his fifty years' association with the Bibliothèque Nationale was celebrated on the 8th of March 1903. After his retirement (February 21, 1905) he brought out in two volumes a catalogue and description of the printed books and MSS. in the Musée Condé at Chantilly, left by the due d'Aumale to the French Institute. He produced many valuable official reports and catalogues and a great number of memoirs and monographs on points connected with palaeography and the study of history and archaeology (see his *Mélanges de paléographie et de bibliographie* (1880) with atlas; and his articles in the *Album paléographique* (1887). Of his purely historical works special mention must be made of his *Mémoire sur les actes d'Innocent III* (1857), and his *Mémoire sur les opérations financières des Templiers* (1889), a collection of documents of the highest value for economic history. The thirty-second volume of the *Histoire littéraire de la France*, which was partly his work, is of great importance for the study of 13th and 14th century Latin chronicles. Delisle was undoubtedly the most learned man in Europe with regard to the middle ages; and his knowledge of diplomatics, palaeography and printing was profound. His output of work, in catalogues, &c., was enormous, and his services to the Bibliothèque Nationale in this respect cannot be overestimated. His wife, a daughter of Eugène Burnouf, was for many years his collaborator.

The *Bibliographie des travaux de L. Delisle* (1902), by Paul Lacombe, may be consulted for a full list of his numerous works.

DELITZSCH, FRANZ (1813-1890), German Lutheran theologian and orientalist, of Jewish descent, was born at Leipzig on the 23rd of February 1813. He studied theology and oriental languages in the university of his native town, and in 1850 was appointed professor ordinarius of theology at Erlangen, where the school of theologians became almost as famous as that of Tübingen. In 1867 he accepted a call to Leipzig, where he

died on the 4th of March 1890. Delitzsch was a strict Lutheran. “By the banner of our Lutheran confession let us stand,” he said in 1888; “folding ourselves in it, let us die” (T. K. Cheyne, *Founders*, p. 160). Greatly interested in the Jews, he longed ardently for their conversion to Christianity; and with a view to this he edited the periodical *Saat auf Hoffnung* from 1863, revived the “Institutum Judaicum” in 1880, founded a Jewish missionary college for the training of theologians, and translated the *New Testament* into Hebrew. He acquired such a mastery of post-biblical, rabbinic and talmudic literature that he has been called the “Christian Talmudist.” Though never an advanced critic, his article on Daniel in the second edition of Herzog’s *Realencyklopädie*, his *New Commentary on Genesis* and the fourth edition of his *Isaiah* show that as years went on his sympathy with higher criticism increased—so much so indeed that Prof. Cheyne has included him among its founders.

He wrote a number of very valuable commentaries on *Habakkuk* (1843), *Genesis* (1852, 4th ed. 1872), *Neuer Kommentar über die Genesis* (1887, Eng. trans. 1888, &c.), *Psalms* (4th ed. 1883, Eng. trans. 1886, &c.), *Job* (2nd ed., 1876), *Isaiah* (4th ed. 1889, Eng. trans. 1890, &c.), *Proverbs* (1873), *Epistle to the Hebrews* (1857, Eng. trans. 1865, &c.), *Song of Songs and Ecclesiastes* (4th ed., 1875). Other works are *Geschichte der jüd. Poesie* (1836); *Jesus und Hillel* (1867, 3rd ed. 1879); *Handwerkerleben zur Zeit Jesu* (1868, 3rd ed. 1878, Eng. trans. in the “Unit Library,” 1902); *Ein Tag in Kapernaum* (1871, 3rd ed. 1886); *Poesieen aus vormuhammedanischer Zeit* (1874); *Iris, Farbenstudien und Blumenstücke* (1888, Eng. trans. 1889); *Messianische Weissagungen in geschichtlicher Folge* (1890, 2nd ed. 1898). His Hebrew *New Testament* reached its eleventh edition in 1891, and his popular devotional work *Das Sakrament des wahren Leibes und Blutes Jesu Christi* its seventh edition in 1886.

His son, Friedrich Delitzsch (b. 1850), became well known as professor of Assyriology in Berlin, and the author of many books of great research and learning, especially on oriental philology. Among other works of importance he wrote *Wo lag das Paradies?* (1881), and *Babel und Bibel* (1902, 1903, Eng. trans. 1903).

DELITZSCH, a town of Germany, in the Prussian province of Saxony, on the Lober, an affluent of the Mulde, 12 m. north of Leipzig at the junction of the railways, Bitterfeld-Leipzig and Halle-Cottbus. Pop. (1905) 10,479. Its public buildings comprise an old castle of the 14th century now used as a female penitentiary, a Roman Catholic and three Protestant churches, a normal college (*Schullehrerseminar*) established in 1873 and several other educational institutions. Besides *Kuhschwanz*, a peculiar kind of beer, it manufactures tobacco, cigars, shoes and hosiery; and coal-mining is carried on in the neighbourhood, It 965
was the birthplace of the naturalist Christian Gottfried Ehrenberg (1795-1876), and the political economist Hermann Schulze-Delitzsch (1808-1883), to the latter of whom a statue has been erected. Originally a settlement of the Sorbian Wends, and in the 12th century part of the possessions of the bishops of Merseburg, Delitzsch ultimately passed to the Saxe-Merseburg family, and, on their extinction in 1738, was incorporated with Electoral Saxony.

DELIUS, NIKOLAUS (1813-1888), German philologist and Shakespearean scholar, was born at Bremen on the 19th of September 1813. He was educated at Bonn and Berlin, and took the degree of doctor in philosophy in 1838. After travelling for some time in England, France and Germany, he returned to Bonn in 1846, where in 1855 he was appointed professor of Sanskrit, Provençal and English literature, a post he held until his death, which took place at Bonn on the 18th of November 1888. His greatest literary achievement was his scholarly edition of Shakespeare (1854-1861). He also edited Wace’s *St Nicholas* (1850), a volume of Provençal songs (1853), and published a *Shakspere-Lexikon* (1852). His original works include: *Über das englische Theaterwesen zu Shaksperes Zeit* (1853), *Gedichte* (1853), *Der sardinische Dialekt des dreizehnten Jahrhunderts* (1868), and *Abhandlungen zu Shakspere* (two series, 1878 and 1888). As a critic of Shakespeare’s text he stands in the first rank.

See the biographical notice by J. Schipper in *Englische Studien*, vol. 14.

DELLA BELLA, STEFANO (1610-1664), Italian engraver, was born at Florence. He was apprenticed to a goldsmith; but some prints of Callot having fallen into his hands, he began to turn his attention entirely towards engraving, and studied the art under Canta Gallina, who had also been the instructor of Callot. By the liberality of Lorenzo de’ Medici he was enabled to spend three years in study at Rome. In 1642 he went to Paris, where Cardinal Richelieu engaged him to go to Arras and make drawings of the siege and taking of that town by the royal army. After residing a considerable time at Paris he returned to Florence, where he obtained a pension from the grand duke, whose son, Cosmo, he instructed in drawing. His productions were very numerous, amounting to over 1400 separate pieces.

DELLA CASA, GIOVANNI (1503-1556), Italian poet, was born at Mugillo, in Tuscany, in 1503. He studied at Bologna, Florence and Rome, and by his learning attracted the patronage of Alexander Farnese, who, as Pope Paul III., made him nuncio to Florence, where he received the honour of being elected a member of the celebrated academy, and then to Naples, where his oratorical ability brought him considerable success. His reward was the archbishopric of Benevento, and it was believed that it was only his openly licentious poem, *Capitoli del forno*, and the fact that the French court seemed to desire his elevation, which prevented him from being raised to a still higher dignity. He died in 1556. Casa is chiefly remarkable as the leader of a reaction in lyric poetry against the universal imitation of Petrarch, and as the originator of a style, which, if less soft and elegant, was more nervous and majestic than that which it replaced. His prose writings gained great reputation in their own day, and long afterwards, but are disfigured by apparent straining after effect, and by frequent puerility and circumlocution. The principal are—in Italian, the famous *Il Galateo* (1558), a treatise of manners, which has been translated into several languages, and in Latin, *De officiis*, and translations from Thucydides, Plato and Aristotle.

A complete edition of his works was published at Florence in 1707, to which is prefixed a life by Casotti. The best edition is that of Venice, 1752.

DELLA COLLE, RAFFAELLINO, Italian painter, was born at Colle, near Borgo San Sepolcro, in Tuscany, about 1490. A pupil of Raphael, whom he is held to have assisted in the Farnesina and the Vatican, Della Colle, after his master's death, was the assistant of his chief scholar, Giulio Romano, at Rome and afterwards at Mantua. In 1536, on the occasion of the entry of Charles V. into Florence, he took service in that city under Vasari. In his later years Della Colle resided at Borgo San Sepolcro, where he kept a school of design; among his many pupils of note may be mentioned Gherardi and Vecchi. His works, which are to be found at Urbino, at Perugia, at Pesaro and at Gubbio, are fine examples of the Roman school of Raphael. The best are a painting of the Almighty supported by angels, a Resurrection and an Assumption, all preserved in churches at Borgo San Sepolcro.

DELLA GHERARDESCA, UGOLINO (*c.* 1220-1289), count of Donoratico, was the head of the powerful family of Gherardesca, the chief Ghibelline house of Pisa. His alliance with the Visconti, the leaders of the Guelph faction, through the marriage of his sister with Giovanni Visconti, judge of Gallura, aroused the suspicions of his party, and the Ghibellines being then predominant in Pisa, the disorders in the city caused by Ugolino and Visconti in 1271-1274 led to the arrest of the former and the banishment of the latter. Visconti died soon afterwards, and Ugolino, no longer regarded as dangerous, was liberated and banished. But he immediately began to intrigue with the Guelph towns opposed to Pisa, and with the help of Charles I. of Anjou (*q.v.*) attacked his native city and forced it to make peace on humiliating terms, pardoning him and all the other Guelph exiles. He lived quietly in Pisa for some years, although working all the time to extend his influence. War having broken out between Pisa and Genoa in 1284, Count Ugolino was given the command of a division of the Pisan fleet. It was by his flight—usually attributed to treachery—that the fortunes of the day were decided and the Pisans totally defeated at La Meloria (October 1284). But the political ability which he afterwards displayed led to his being appointed *podestà* for a year and *capitano del popolo* for ten years. Florence and Lucca took advantage of the Pisan defeat to attack the republic, but Ugolino succeeded in pacifying them by ceding certain castles. He was however less anxious to make peace with Genoa, for the return of the Pisan prisoners, including most of the leading Ghibellines, would have diminished his power. He was now the most influential man in Pisa, and was preparing to establish his absolute sovereignty, when for some reason not clearly understood he was forced to share his power with his nephew Nino Visconti, son of Giovanni. The duumvirate did not last, and the count and Nino soon quarrelled. Then Ugolino tried to consolidate his position by entering into negotiations with the archbishop, Ruggieri degli Ubaldini, the leader of the Ghibellines. But that party having revived once more, the archbishop obliged both Nino and Ugolino to leave the city, and had himself elected *podestà* and *capitano del popolo*. However, he allowed Ugolino to return soon afterwards, and was even ready to divide the government of the city with him, although he refused to admit his armed followers. The count, determined to be sole master, attempted to get his followers into the city by way of the Arno, and Ruggieri, realizing the danger, aroused the citizens, accusing Ugolino of treachery for having ceded the castles, and after a day's street fighting (July 1, 1288), Gherardesca was captured and immured together with his sons Gaddo and Uguccione, and his grandsons Nino (surnamed *il Brigata*) and Anselmuccio, in the Muda, a tower belonging to the Gualandi family; here they were detained for nine months, and then starved to death.

The historic details of the episode are still involved in some obscurity, and although mentioned by Villani and other writers, it owes its fame entirely to Dante, who placed Ugolino and Ruggieri in the second ring (*Antenora*) of the lowest circle of the *Inferno* (canto xxxii. 124-140 and xxxiii. 1-90). This terrible but magnificent passage, which includes "thirty lines unequalled by any other thirty lines in the whole dominion of poetry" (Landor), has been paraphrased by Chaucer in the "Monk's Tale" and more recently by Shelley. But the reason why Dante placed Ugolino among the traitors is not by any means clear, as the flight from La Meloria was not regarded as treachery by any writer earlier than the 16th century, although G. del Noce, in *Il Conte U. della Gherardesca* (Città di Castello, 1894), states that that was the only motive; Bartoli, in vol. vi. of his *Storia della Letteratura italiana*, suggests Ugolino's alliance with the Ghibellines as the motive. The cession of the castles was not treachery but an act of necessity, owing to the desperate conditions of Pisa.

BIBLIOGRAPHY.—Besides the above-quoted works see P. Tronci, *Annali Pisani* (2 vols., Pisa, 1868-1871); S. de Sismondi, *Histoire des républiques italiennes* (Brussels, 1838); also the various annotated editions of Dante, especially W. W. Vernon's *Readings from the Inferno*, vol. ii. (2nd ed., London, 1905).

(L. V.*)

DELLA PORTA, GIOVANNI BATTISTA (*c.* 1538-1615), Italian natural philosopher, was born of a noble and ancient family at Naples about the year 1538. He travelled extensively not only in Italy but also in France and Spain, and he was still a youth when he published *Magia naturalis, sive de miraculis rerum naturalium lib. IV.* (1558), the first draft of his *Magia naturalis*, in twenty books, published in 1589. He founded in Naples the Academia Secretorum Naturae, otherwise known as the Accademia dei Oziosi; and in 1610 he became a member of the Accademia dei Lincei at Rome. He died at Naples on the 4th of February 1615.

The following is a list of his principal writings:—*De miraculis rerum naturalium*, in four books (1558); *De furtivis litterarum notis*, in five books (1563, and frequently afterwards, entitling him to high rank among the early writers on cryptography); *Phytognomonica* (1583, a bulky treatise on the physiology of plants as then understood); *Magia naturalis* (1589, and often reprinted); *De humana physiognomonia*, in six books (1591); *Villa*, in twelve books (1592, an interesting practical treatise on farming, gardening and arboriculture, based upon his own observations at his country-seat near Naples); *De refractione, optices parte*, in nine books (1593); *Pneumatica*, in three books (1601); *De coelesti physiognomonia*, in six books (1601); *Elementa curvilinea* (1601); *De distillatione*, in nine books (1604); *De munitione*, in three books (1608); and *De aëris transmutationibus*, in four books (1609). He also wrote several Italian comedies *Olimpia* (1589); *La Fantesca* (1592); *La Trappolaria* (1597); *I' Due Fratelli rivali* (1601); *La Sorella* (1607); *La Chiappinaria* (1609); *La Carbonaria* (1628); *La Cintia* (1628). Among all the above-mentioned works the chief interest attaches to the *Magia naturalis*, in which a strange medley of subjects is discussed, including the reproduction of animals, the transmutation of metals, pyrotechny, domestic economy, statics, hunting, the preparation of perfumes. In book xvii. he describes a number of optical experiments, including a description of the camera obscura (*q.v.*).

DELLA QUERCIA, or DELLA FONTE, **JACOPO** (1374-1438), Italian sculptor, was born at Siena. He was the son of a goldsmith of repute, Pietro d'Agnolo, to whom he doubtless owed much of his training. There are no records of his early life until the year 1394, when he made an equestrian statue of Gian Tedesco. He is next heard of at Florence in 1402, when he was one of six artists who submitted designs for the great gates of the baptistery, in which competition Ghiberti was the victor. From Florence he seems to have gone to Lucca, where in 1406 he executed one of his finest works, the monument of Ilaria del Caretto, wife of Paolo Guinigi. It is uncertain if he visited Ferrara in 1408; but at the end of that year he was engaged in negotiations which resulted in his acceptance of the commission for the famous Fonte Gaia, at Siena, early in 1409. This work was not seriously begun by him until 1414, and was only finished in 1419. In 1858 the remains of the fountain were removed to the Opera del Duomo, where they are now preserved; a copy of the original by Sarrocchi being erected on the site. After another visit to Lucca in 1422, he returned to Siena, and in March 1425 undertook the contract for the doors of S. Petronio, Bologna. He is known, in following years, to have been to Milan, Verona, Ferrara and Venice; but the rest of his life was chiefly divided between his native city and Bologna. In 1430 he finished the great font of S. Giovanni at Siena, which he had begun in 1417, contributing himself only one of the bas-reliefs, "Zacharias in the Temple," the others being by Ghiberti, Donatello and other sculptors. Among the work known to have been done by Jacopo, may be mentioned also the reliefs of the *predella* of the altar of S. Frediano at Lucca (1422); and the Bentivoglio monument which was unfinished at the time of his death on the 20th of October 1438. Jacopo della Quercia's work exercised a powerful influence on that of the artists of the later Italian Renaissance. He himself reflects not a little of the Gothic spirit, admirably intermixed with some of the best qualities of neo-classicism. He was an artist whose powers have hardly yet received the recognition they undoubtedly deserve.

See C. Cornelius, *Jacopo della Quercia: eine Kunsthistorische Studie* (1896), and works relating generally to the arts in Siena.

(E. F. S.)

DELLA ROBBIA, the name of a family of great distinction in the annals of Florentine art. Its members are enumerated in chronological order below.[1]

I. LUCA DELLA ROBBIA (1399 or 1400[2]-1482) was the son of a Florentine named Simone di Marco della Robbia. According to Vasari, whose account of Luca's early life is little to be trusted, he was apprenticed to the silversmith Leonardo di Ser Giovanni, who from 1355 to 1371 was working on the grand silver altar frontal for the cathedral at Pistoia (*q.v.*); this, however, appears doubtful from the great age which it would give to Leonardo, and it is more probable that Luca was the pupil of Ghiberti. During the early part of his life Luca executed many important and exceedingly beautiful pieces of sculpture in marble and bronze. In technical skill he was quite the equal of Ghiberti, and, while possessing all Donatello's vigour, dramatic power and

originality, he very frequently excelled him in grace of attitude and soft beauty of expression. No sculptured work of the great 15th century ever surpassed the singing gallery which Luca made for the cathedral at Florence between 1431 and 1440, with its ten magnificent panels of singing angels and dancing boys, far exceeding in beauty those which Donatello in 1433 sculptured for the opposite gallery in the same choir. This splendid work is now to be found in the Museo del Duomo. The general effect of the whole can also be seen at the Victoria and Albert Museum, where a complete cast is fixed to the wall. The same museum possesses a study in *gesso duro* for one of the panels, which appears to be the original sketch by Luca's own hand.

In May 1437 Luca received a commission from the signoria of Florence to execute five reliefs for the north side of the campanile, to complete the series begun by Giotto and Andrea Pisano. These panels are so much in the earlier style of Giotto that we must conclude that he had left drawings from which Luca worked. They have representative figures chosen to typify grammar, logic, philosophy, music, and science,—the last represented by Euclid and Ptolemy.[3] In 1438 Luca in association with Donatello received an order for two marble altars for chapels in the cathedral. The reliefs from one of them—St Peter's Deliverance from Prison and his Crucifixion—are now in the Bargello. It is probable that these altars were never finished. A tabernacle for the host, made by Luca in 1442, is now at Peretola, near Florence, in the church of S. Maria. A document in the archives of S. Maria Nuova at Florence shows that he received for this 700 florins 1 lira 16 soldi (about £1400 of modern money). In 1437 Donatello received a commission to cast a bronze door for one of the sacristies of the cathedral; but, as he delayed to execute this order, the work was handed over to Luca on the 28th of February 1446, with Michelozzo and Maso di Bartolomeo as his assistants. Part of this wonderful door was cast in 1448, and the last two panels were finished by Luca in 1467, with bronze which was supplied to him by Verrocchio.[4] The door is divided into ten square panels, with small heads in the style of Ghiberti projecting from the framing. The two top subjects are the Madonna and Child and the Baptist, next come the four Evangelists, and below are the four Latin Doctors, each subject with attendant angels. The whole is modelled with perfect grace and dignified simplicity; the heads throughout are full of life, and the treatment of the drapery in broad simple folds is worthy of a Greek sculptor of the best period of Hellenic art. These exquisite reliefs are perfect models of plastic art, and are quite free from the over-elaboration and too pictorial style of Ghiberti. Fig. 1 shows one of the panels.

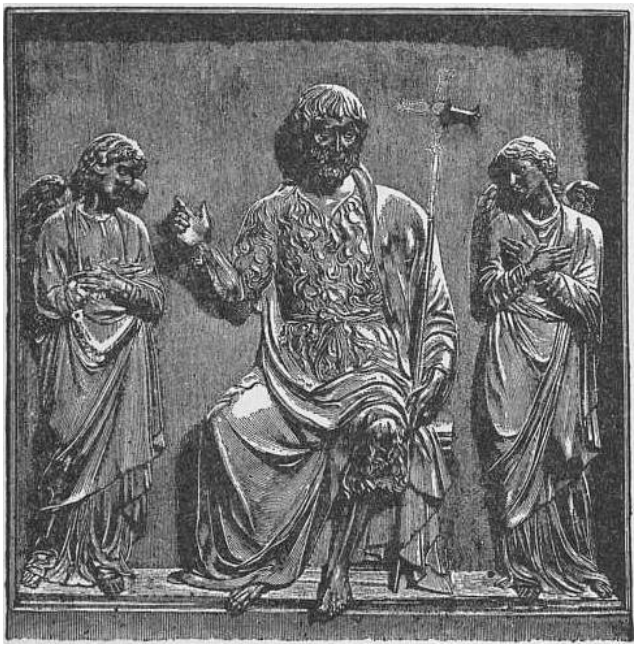


Fig. 1.—Bronze Relief of one of the Latin Doctors, from the sacristy door in the cathedral of Florence, by Luca.

The most important existing work in marble by Luca (executed in 1454-1456) is the tomb of Benozzo Federighi, bishop of Fiesole, originally placed in the church of S. Pancrazio at Florence, but removed to S. Francesco di Paola on the Bellosguardo road outside the city in 1783. In 1898 it was again removed to the church of SS. Trinita in Florence. A very beautiful effigy of the bishop in a restful pose lies on a sarcophagus sculptured with graceful reliefs of angels holding a wreath which contains the inscription. Above are three-quarter length figures of Christ between St John and the Virgin, of conventional type. The whole is surrounded by a rectangular frame formed of painted tiles of exquisite beauty, but out of keeping with the memorial. On each tile is painted, with enamel pigments, a bunch of flowers and fruit in brilliant realistic colours, the loveliness of which is very hard to describe. Though the bunch of flowers on each is painted on one slab, the ground of each tile is formed of separate pieces, fitted together like a kind of mosaic, probably because the pigment of the ground required a different degree of heat in firing from that needed for the enamel painting of the centre. The few other works of this class which exist do not approach the beauty of this early essay in tile painting, on which Luca evidently put forth his utmost skill and patience.

In the latter part of his life Luca was mainly occupied with the production of terra-cotta reliefs covered with enamel, a process which he improved upon, but did not invent, as Vasari asserts. The *rationale* of this process was to cover the clay relief with an enamel formed of the ordinary ingredients of glass (*marzacotto*), made white and opaque by oxide of tin. (See Ceramics: *Italian Majolica*.) Though Luca was not the inventor of the process, yet he extended its application to fine sculptured work in terra-cotta, so that it is not unnaturally known now as Della Robbia ware; it must, however, be remembered that by far the majority of these reliefs which in Italy and elsewhere are ascribed to Luca are really the work of some of the younger members of the family or of the *atelier* which they founded. Comparatively few exist which can with certainty be ascribed to Luca himself. Among the earliest of these are medallions of the four Evangelists in the vault of Brunelleschi's

Pazzi chapel in S. Croce. These fine reliefs are coloured with various metallic oxides in different shades of blue, green, purple, yellow and black. It has often been asserted that the very polychromatic reliefs belong to Andrea or his sons, and that Luca's were all in pure white, or in white and blue; this, however, is not the case; colours were used as freely by Luca as by his successors. A relief in the Victoria and Albert Museum furnishes a striking example of this and is of especial value from its great size, and also because its date is known. This is an enormous medallion containing the arms of René of Anjou and other heraldic devices; it is surrounded by a splendidly modelled wreath of fruit and flowers, especially apples, lemons, oranges and fir cones, all of which are brilliantly coloured. This medallion was set up on the façade of the Pazzi Palace to commemorate René's visit to Florence in 1442. Other reliefs by Luca, also in glazed terra-cotta, are those of the Ascension and Resurrection in the tympani of the doors of the sacristies in the cathedral, executed in 1443 and 1446. Other existing works of Luca in Florence are the tympanum reliefs of the Madonna between two Angels in the Via dell' Agnolo, a work of exquisite beauty, and another formerly over the door of S. Pierino del Mercato Vecchio, but now removed to the Bargello (No. 29). The only existing statues by Luca are two lovely enamelled figures of kneeling angels holding candlesticks, now in the canons' sacristy.[5] A very fine work by Luca, executed between 1449 and 1452, is the tympanum relief of the Madonna and four Monastic Saints over the door of S. Domenico at Urbino.[6] Luca also made the four coloured medallions of the Virtues set in the vault over the tomb of the young cardinal-prince of Portugal in a side chapel of S. Miniato in Florence (see Rossellino). By Luca also are various polychromatic medallions outside Or San Michele.[7] One of his chief decorative works which no longer exists was a small library or study for Piero de' Medici, wholly lined with enamelled plaques and reliefs.[8] The Victoria and Albert Museum possesses twelve circular plaques of majolica ware painted in blue and white with the Occupations of the Months; these have been attributed to Luca, under the idea that they formed part of the decoration of this room, but their real origin is doubtful.

In 1471 Luca was elected president of the Florentine Gild of Sculptors, but he refused this great honour on account of his age and infirmity. It shows, however, the very high estimation in which he was held by his contemporaries. He died on the 20th of February 1482, leaving his property to his nephews Andrea and Simone.[9] His chief pupil was his nephew Andrea, and Agostino di Duccio, who executed many pieces of sculpture at Rimini, and the graceful but mannered marble reliefs of angels on the façade of S. Bernardino at Perugia, may have been one of his assistants.[10] Vasari calls this Agostino Luca's brother, but he was not related to him at all.

II. Andrea della Robbia (1435-1525), the nephew and pupil of Luca, carried on the production of the enamelled reliefs on a much larger scale than his uncle had ever done; he also extended its application to various architectural uses, such as friezes and to the making of lavabos (lavatories), fountains and large retables. The result of this was that, though the finest reliefs from the workshop of Andrea were but little if at all inferior to those from the hand of Luca, yet some of them, turned out by pupils and assistants, reached only a lower standard of merit. Only one work in marble by Andrea is known, namely, an altar in S. Maria delle Grazie near Arezzo, mentioned by Vasari (ed. Milanesi, ii. p. 179), and still well preserved.

Fig. 2.—Enamelled Clay Relief of Virgin and Child, by Andrea.

One variety of method was introduced by Andrea in his enamelled work; sometimes he omitted the enamel on the face and hands (nude parts) of his figures, especially in those cases where he had treated the heads in a realistic manner; as, for example, in the noble tympanum relief of the meeting of St Domenic and St Francis in the loggia of the Florentine hospital of S. Paolo,—a design suggested by a fresco of Fra Angelico's in the cloister of St Mark's. One of the most remarkable works by Andrea is the series of medallions with reliefs of

Infants in white on a blue ground set on the front of the foundling hospital at Florence. These lovely child-figures are modelled with wonderful skill and variety, no two being alike. Andrea produced, for gilds and private persons, a large number of reliefs of the Madonna and Child varied with much invention, and all of extreme beauty of pose and sweetness of expression. These are frequently framed with realistic yet decorative garlands of fruit and flowers painted with coloured enamels, while the main relief is left white. Fig. 2 shows a good example of these smaller works. The hospital of S. Paolo, near S. Maria Novella, has also a number of fine medallions with reliefs of saints, two of Christ Healing the Sick, and two fine portraits, under which are white plaques inscribed—"DALL ANNO 1451 ALL ANNO 1495"[11]; the first of these dates is the year when the hospital was rebuilt owing to a papal brief sent to the archbishop of Florence. Arezzo possesses a number of fine enamelled works by Andrea and his sons—a retable in the cathedral with God holding the Crucified Christ, surrounded by angels, and below, kneeling figures of S. Donato and S. Bernardino; also in the chapel of the Campo Santo is a fine relief of the Madonna and Child with four saints at the sides. In S. Maria in Grado is a very noble retable with angels holding a crown over a standing figure of the Madonna; a number of small figures of worshippers take refuge in the folds of the Virgin's mantle, a favourite motive for sculpture dedicated by gilds or other corporate bodies. Perhaps the finest collection of works of this class is at La Verna, not far from Arezzo (see Vasari, ed. Milanesi, ii. p. 179). The best of these, three large retables with representations of the Annunciation, the Crucifixion, and the Madonna giving her Girdle to St Thomas, are probably the work of Andrea himself, the others being by his sons. In 1489 Andrea made a beautiful relief of the Virgin and two Angels, now over the archive-room door in the Florentine Opera del Duomo; for this he was paid twenty gold florins (see Cavallucci, *S. Maria del Fiore*). In the same year he modelled the fine tympanum relief over a door of Prato cathedral, with a half-length figure of the Madonna between St Stephen and St Lawrence, surrounded by a frame of angels' heads.

In 1491 he was still working at Prato, where many of his best reliefs still exist. A fine bust of S. Lino exists over the side door of the cathedral at Volterra, which is attributed to Andrea. Other late works of known date are a magnificent bust of the Protonotary Almadiano, made in 1510 for the church of S. Giovanni de' Fiorentini at Viterbo, now preserved in the Palazzo Communale there, and a medallion of the Virgin in Glory, surrounded by angels, made in 1505 for Pistoia cathedral.[12] The latest work attributed to Andrea, though apparently only a workshop production of 1515, is a relief representing the Adoration of the Magi, made for a little church, St Maria, in Pian di Mugnone, near Florence.[13] Portions of this work are still in the church, but some fragments of it are at Oxford.

III., IV. Five of Andrea's seven sons worked with their father, and after his death carried on the Robbia fabrique; the dates of their birth are shown in the table on p. 838 *ante*. Early in life two of them came under the influence of Savonarola, and took monastic orders at his Dominican convent; these were MARCO, who adopted the name of Fra Luca, and PAOLO, called Fra Ambrogio. One relief by the latter, a Nativity with four life-sized figures of rather poor work, is in the Cappella degli Spagnuoli in the Sienese convent of S. Spirito; a MS. in the convent archives records that it was made in 1504.

V. The chief existing work known to be by the second LUCA[14] is the very rich and beautiful tile pavement in the uppermost story of Raphael's loggie at the Vatican, finely designed and painted in harmonious majolica colours. This was made by Luca at Raphael's request and under his supervision in 1518.[15] It is still in very fine preservation.

VI. GIOVANNI DELLA ROBBIA (1460-1529?) during a great part of his life worked as assistant to his father, Andrea, and in many cases the enamelled sculpture of the two cannot be distinguished. Some of Giovanni's independent works are of great merit, especially the earlier ones; during the latter part of his life his reliefs deteriorated in style, owing mainly to the universal decadence of the time. A very large number of pieces of Robbia ware which are attributed to Andrea, and even to the elder Luca, were really by the hand of Giovanni. One of his finest works is a large retable at Volterra in the church of S. Girolamo, dated 1501; it represents the Last Judgment, and is remarkable for the fine modelling of the figures, especially that of the archangel Michael, and a nude kneeling figure of a youth who has just risen from his tomb. Quite equal in beauty to anything of his father's, from whom the design of the figures was probably taken, is the washing-fountain in the sacristy of S. Maria Novella at Florence, made in 1497.[16] It is a large arched recess with a view of the seashore, not very decorative in style, painted on majolica tiles at the back. There are also two very beautiful painted majolica panels of fruit-trees let into the lower part. In the tympanum of the arch is a very lovely white relief of the Madonna between two Adoring Angels (see fig. 3). Long coloured garlands of fruit and flowers are held by nude boys reclining on the top of the arch and others standing on the cornice. All this part is of enamelled clay, but the basin of the fountain is of white marble. Neither Luca nor Andrea was in the habit of signing his work, but Giovanni often did so, usually adding the date, probably because other potters had begun to imitate the Robbia ware.[17]

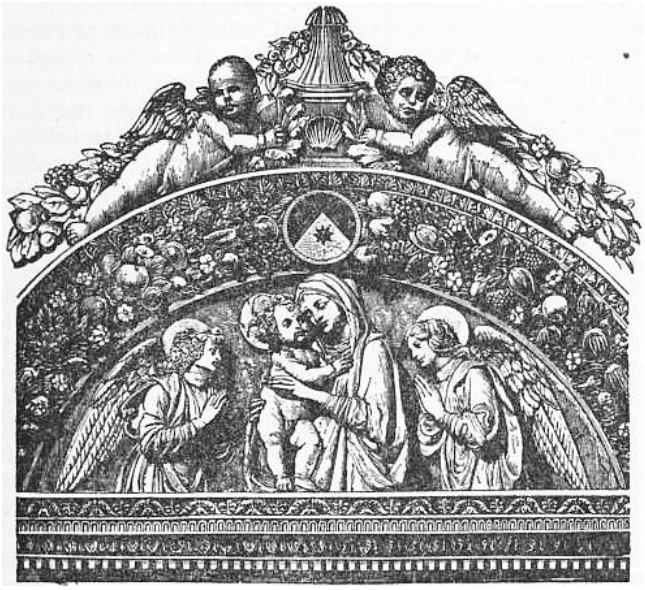


Fig. 3.—Relief of Madonna and Angels in the tympanum of the lavabo (S. Maria Novella, Florence), by Giovanni.

Giovanni lacked the original talent of Luca and Andrea, and so he not only copied their work but even reproduced in clay the marble sculpture of Pollaiuolo, Da Settignano, Verrocchio and others. A relief by him, evidently taken from Mino da Fiesole, exists in the Palazzo Castracane Staccoli. Among the very numerous other works of Giovanni are a relief in the wall of a suppressed convent in the Via Nazionale at Florence, and two reliefs in the Bargello dated 1521 and 1522. That dated 1521 is a many-coloured relief of the Nativity, and was taken from the church of S. Girolamo in Florence; it is a too pictorial work, marred by the use of many different planes. Its predella has a small relief of the Adoration of the Magi, and is inscribed "Hoc opus fecit Ioaes Andee de Robia, ac a posuit hoc in tempore die ultima lulli ANO. DNI. M.D. XXI." At Pisa in the Campo Santo is a relief in Giovanni's later and poorer manner dated 1520; it is a Madonna surrounded by angels, with saints below—the whole overcrowded with figures and ornaments. Giovanni's largest and perhaps finest work is the polychromatic frieze on the outside of the Del Ceppo hospital at Pistoia, for which he received various sums of money between 1525 and 1529, as is recorded in documents which still exist among the archives of the hospital.[18] The subjects of this frieze are the Seven Works of Mercy, forming a continuous band of sculpture in high relief, well modelled and designed in a very broad sculpturesque way, but disfigured by the crudeness of some of its colouring. Six of these reliefs are by Giovanni, namely, Clothing the Naked, Washing the Feet of Pilgrims, Visiting the Sick, Visiting Prisoners, Burying the Dead, and Feeding the Hungry. The seventh, Giving drink to the Thirsty, was made by Filippo Paladini of Pistoia in 1585; this last is simply made of painted stucco. The large figures of the virtues placed between the scenes, and the medallions between the pillars, are the work of assistants or imitators.

A large octagonal font of enamelled clay, with pilasters at the angles and panels between them with scenes from the life of the Baptist, in the church of S. Leonardo at Cerreto Guidi, is a work of the school of Giovanni; the reliefs are pictorial in style and coarse in execution. Giovanni's chief pupil was a man named Benedetto Buglioni (1461-1521), and a pupil of his, one Santi Buglioni (b. 1494), entered the Robbia workshops in 1521, and assisted in the later works of Giovanni.

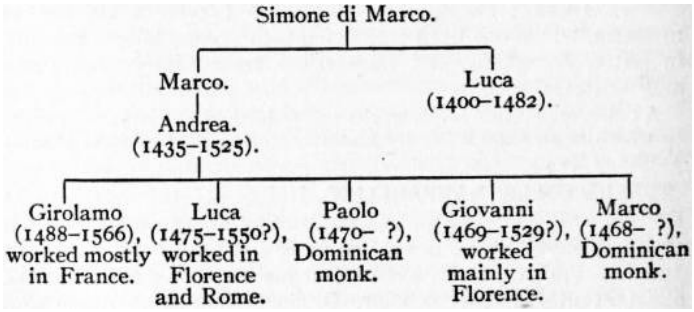
VII. Girolamo della Robbia (1488-1566), another of Andrea's sons, was an architect and a sculptor in marble and bronze as well as in enamelled clay. During the first part of his life he, like his brothers, worked with his father, but in 1528 he went to France and spent nearly forty years in the service of the French Royal family. Francis I. employed him to build a palace in the Bois de Boulogne called the Château de Madrid. This was a large well-designed building, four storeys high, two of them having open loggie in the Italian fashion. Girolamo decorated it richly with terra-cotta medallions, friezes and other architectural features.[19] For this purpose he set up kilns at Suresnes. Though the palace itself has been destroyed, drawings of it exist.[20]

The best collections of Robbia ware are in the Florentine Bargello, Accademia and Museo del Duomo; the Victoria and Albert Museum (the finest out of Italy); the Louvre, the Cluny and the Berlin Museums; while fine examples are to be found in New York, Boston, St Petersburg and Vienna. Many fine specimens exist in private collections in England, France, Germany and the United States. The greater part of the Robbia work still remains in the churches and other buildings of Italy, especially in Florence, Fiesole, Arezzo, La Verna, Volterra, Barga, Montepulciano, Lucca, Pistoia, Prato and Siena.

Literature.—H. Barbet de Jouy, *Les della Robbia* (Paris, 1855); W. Bode, *Die Künstlerfamilie della Robbia* (Leipzig, 1878); "Luca della Robbia ed i suoi precursori in Firenze," *Arch. stor. dell' arte* (1899); "Über Luca della Robbia," *Sitzungsbericht von der Berliner kunstgeschichtlichen Gesellschaft* (1896); *Florentiner Bildhauer der Renaissance* (Berlin, 1902); G. Carocci, *I Dintorni de Firenze* (Florence, 1881); "Il Monumento di Benozzo Federighi," *Arte e Storia* (1894); "Opere Robbiane poco noti," *Arte e storia* (1898, 1899); Cavallucci et Molinier, *Les della Robbia* (Paris, 1884); Maud Crutwell, *Luca and Andrea della Robbia and their Successors* (London, 1902); A. du Cerceau, *Les plus excellents bastiments de France* (Paris, 1586); G. Milanesi, *Le Vite scritte da Vasari* (Florence, 1878); M. Reymond, *Les della Robbia* (Florence, 1897); *La Sculpture Florentine* (Florence, 1898); I. B. Supino, *Catalogo del R. Museo di Firenze* (Rome 1898); Vasari (see Milanesi's edition).

(J. H. M.; W. B.*)

1 Genealogical tree of Della Robbia sculptors:—



2 Not 1388, as Vasari says. See a document printed by Gaye, *Carteggio inedito*, i. pp. 182-186.

3 Vasari is not quite right in his account of these reliefs: he speaks of Euclid and Ptolemy as being in different panels.

4 See Cavallucci, *S. Maria del Fiore*, pt. ii. p. 137.

5 The Victoria and Albert Museum possesses what seem to be fine replicas of these statues.

6 The document in which the order for this and the price paid for it are recorded is published by Yriarte, *Gaz. d. beaux arts*, xxiv. p. 143.

7 One of these medallions, that of the Physicians, is now removed to the inside of the church.

8 It is fully described by Filarete in his *Trattato dell' architectura*, written in 1464, and therefore was finished before that date; see also Vasari, ed. Milanesi (Florence, 1880), ii. p. 174.

9 His will, dated 19th February 1471, is published by Gaye, *Cart. ined.* i. p. 185.

10 In the works of Perkins and others on Italian sculpture these Perugian reliefs are wrongly stated to be of enamelled clay.

11 Professor Marquand has discovered, beneath 1451, the inscription Prete Benino, and, under 1495, De Benini; probably the names of the governors of the hospital at these dates.

12 See Gualandi, *Memorie risguardanti le belle arti* (Bologna, 1845), vi. pp. 33-35, where original documents are printed recording the dates and prices paid for these and other works of Andrea.

13 See a document printed by Milanesi in his Vasari, ii. p. 180.

14 It appears certain that this Luca was a layman and not the Fra Luca referred to above.

15 It is illustrated by Gruner, *Fresco Decorations of Italy* (London, 1854), pl. iv.; see also Müntz, *Raphaël, sa vie*, &c. (Paris, 1881), p. 452, note i., and Vasari, ed. Milanesi, ii. p. 182.

16 See a document printed by Milanesi in his Vasari, ii. 193.

17 Examples of these imitations are a retable in S. Lucchese near Poggibonsi dated 1514, another of the Madonna and Saints at Monte San Savino of 1525, and a third in the Capuchin church of Arceria near Sinigaglia; they are all inferior to the best works of the Robbia family, though some of them may have been made by assistants trained in the Robbia workshops.

18 The hospital itself was begun in 1514.

19 The Sèvres Museum possesses some fragments of these decorations.

20 See Laborde, *Château de Madrid* (Paris, 1853), and *Comptes des bâtiments du roi* (Paris, 1877-1880), in which a full account is given of Girolamo's work in connexion with this palace.

DELMEDIGO, a Cretan Jewish family, of whom the following are the most important:

Elijah Delmedigo (1460-1497), philosopher, taught in several Italian centres of learning. He translated some of Averroes' commentaries into Latin at the instigation of Pico di Mirandola. In the sphere of religion, Delmedigo represents the tendency to depart from the scholastic attitude in which religion and philosophy were identified. His most important work was devoted to this end; it was entitled *Behinath ha-Dath* (Investigation of Religion).

Joseph Solomon Delmedigo (1591-1655), pupil of Galileo, wrote many books on science and philosophy, and bore a considerable part in initiating the critical movement in Judaism. He belonged to the sceptical school, and though his positive contributions to literature were not of lasting worth, Graetz includes him among the important formative influences within the synagogue of the 17th century.

(I. A.)

DELMENHORST, a town of Germany, grand duchy of Oldenburg, on the Delme, 8 m. by rail W. from Bremen, at the junction of a line to Vechta. Pop. (1905) 20,147. It has a Protestant and a Roman Catholic church, and is the seat of considerable industries; notably wool-combing, weaving, jute-spinning and the manufacture of linoleum. Delmenhorst was founded in 1230, and from 1247 to 1679, when it was destroyed

by the French, was protected by a strong castle.

DELOLME, JEAN LOUIS (1740-1806), Swiss jurist and constitutional writer, was born at Geneva in 1740. He studied for the bar, and had begun to practise when he was obliged to emigrate on account of a pamphlet entitled *Examen de trois parts de droit*, which gave offence to the authorities of the town. He took refuge in England, where he lived for several years on the meagre and precarious income derived from occasional contributions to various journals. In 1775 he found himself compelled to accept aid from a charitable society to enable him to return home. He died at Sewen, a village in the canton of Schwyz, on the 16th of July 1806.

During his protracted exile in England Delolme made a careful study of the English constitution, the results of which he published in his *Constitution de l'Angleterre* (Amsterdam, 1771), of which an enlarged and improved edition in English appeared in 1772, and was several times reprinted. The work excited much interest as containing many acute observations on the causes of the excellence of the English constitution as compared with that of other countries. It is, however, wanting in breadth of view, being written before the period when constitutional questions were treated in a scientific manner. Along with a translation of Hume's *History of England* it supplied the *philosophes* with most of their ideas about the English constitution. It thus was used somewhat as a political pamphlet. Several editions were published after the author's death. Delolme also wrote in English *Parallel between the English Government and the former Government of Sweden* (1772); A *History of the Flagellants* (1782), based upon a work of Boileau's; *An Essay on the Union of Scotland with England* (1787), and one or two smaller works.

DELONEY (or DELONE), **THOMAS,** English ballad-writer and pamphleteer, produced his earliest indisputable work in 1586, and died about 1600. In 1596 Thomas Nashe, in his *Have with you to Saffron Walden*, wrote: "Thomas Deloney, the ballating silk-weaver, hath rime enough for all myracles, and wit to make a Garland of Good Will more than the premisses ... and this deare yeare, together with the silencing of his looms, scarce that, he being constrained to betake himself to carded ale; whence it proceedeth that since Candlemas, or his jigge, John for the king, not one merrie dittie will come from him, but, the Thunderbolt against Swearers,—Repent, England, Repent—and, the strange Judgements of God." In 1588 the coming of the Armada inspired him for three broadsides, which were reprinted (1860) by J. O. Halliwell-Phillipps. They are entitled "The Queenes visiting of the Campe at Tilsburie with her entertainment there," "A Joyful new Ballad, declaring the happie obtaining of the great Galleazzo ...," and "A new Ballet of the straunge and Most cruell Whippes which the Spaniards had prepared." A collection of *Strange Histories* (1607) consists of historical ballads by Deloney, with some poems from other hands. This collection, known in later and enlarged editions as *The Royal Garland of Love and Delight* and *The Garland of Delight*, contains the ballad of Fair Rosamond. J. H. Dixon in his preface to *The Garland of Good Will* (Percy Society, 1851) ascribes to Deloney *The Blind Beggar of Bednall Green*, and *The Pleasant and sweet History of Patient Grissel*, in prose, with the whole of the *Garland of Good Will*, including some poems such as "The Spanish Lady's Love" generally supposed to be by other hands. His other works include *The Gentle Craft* (1597) in praise of shoemakers, *The Pleasant Historie of John Winchecombe* (8th ed., 1619), and *Thomas of Reading or the Sixe Worthie Yeomen of the West* (earliest extant edition, 1612). Kempe, the actor, jeers at these histories in his *Nine Daies Wonder*, but they were very popular, being reprinted as penny chap-books.

DE LONG, GEORGE WASHINGTON (1844-1881), American explorer, was born in New York city on the 22nd of August 1844. He graduated at the U.S. Naval Academy in 1865, and spent the next fourteen years in naval service in various parts of the world, attaining the rank of lieutenant in 1869, and lieutenant-commander in 1879. In 1873 he took part in the voyage of the "Juniata," sent to search for and relieve the American Arctic expedition under Hall in the "Polaris," commanding a steam launch which was sent out from Upernivik, Greenland, to make a thorough search of Melville Bay. On his return to New York the same year he proposed to James Gordon Bennett, of *The New York Herald*, that the latter should fit out a Polar expedition. It was not until 1879 that the final arrangements were made, the "Pandora," a yacht which had already made two Arctic voyages under Sir Allen Young, being purchased and rechristened the "Jeannette" for this voyage. The story of this expedition (see POLAR REGIONS) is chiefly remarkable on account of the long and helpless drifting of the "Jeannette" with the polar ice-pack in which she was caught (September 5, 1879) and by which she was finally crushed and sunk on the 13th of June 1881. The members of the expedition set out in three boats, one of which was lost in a gale, while another boat-load under De Long died from starvation after reaching the mouth of the Lena river. He was the last survivor of his party. His journal, in which he made regular entries up to the day on which he died (October 30, 1881) was edited by his wife and published in 1883 under the title *Voyage of the "Jeannette"*; and an account of the search which was made for him and his comrades by his heroic companion George W. Melville, who was chief engineer of the expedition and commanded the third of the retreating parties, was published a year later under the title of *In the Lena Delta*. The fate of the "Jeannette" was still more remarkable in its sequel. Three years after she had

sunk several articles belonging to her crew were found on an ice-floe near Julianshaab on the south-west coast of Greenland; thus adding fresh evidence to the theory of a continuous ocean current passing across the unknown Polar regions, which was to be finally demonstrated by Nansen's voyage in the "Fram." By direction of the United States government, the remains of De Long and his companions were brought home and interred with honour in his native city.

DELORME, MARION (*c.* 1613-1650), French courtesan, was the daughter of Jean de Lou, sieur de l'Orme, president of the treasurers of France in Champagne, and of Marie Chastelain. She was born at her father's château near Champaubert. Initiated into the philosophy of pleasure by the epicurean and atheist Jacques Vallée, sieur Desbarreaux, she soon left him for Cinq Mars, at that time at the height of his popularity, and succeeded, it is said, in marrying him in secret. From this time Marion Delorme's salon became one of the most brilliant centres of elegant Parisian society. After the execution of Cinq Mars she is said to have numbered among her lovers Charles de St Evremond (1610-1703) the wit and littérateur, Buckingham (Villiers), the great Condé, and even Cardinal Richelieu. Under the Fronde her salon became a meeting place for the disaffected, and Mazarin is said to have sent to arrest her when she suddenly died. Her last years have been adorned with considerable legend (cf. Merecourt, *Confessions de Marie Delorme*, Paris, 1856). It seems established that she died in 1650. But she was believed to have lived until 1706 or even 1741, after having had the most fantastic adventures, including marriage with an English lord, and an old age spent in poverty in Paris. Her name has been popularized by various authors, especially by Alfred de Vigny in his novel *Cinq Mars*, by Victor Hugo in the drama *Marion Delorme*, and by G. Bottesini in an opera of the same title.

See P. J. Jacob, *Marion Delorme et Ninon Lenclos* (Paris, 1859); J. Peladan, *Histoire et légende de Marion de Lorme* (Paris, 1882).

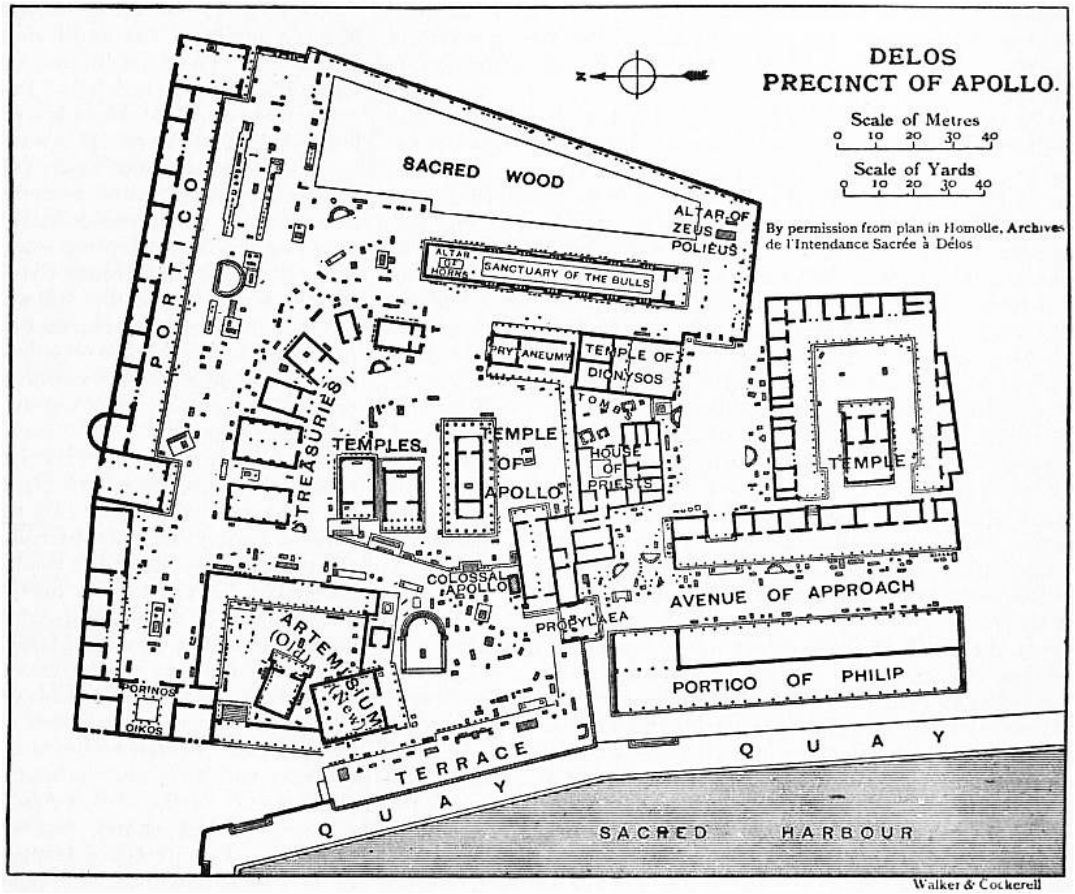
DE L'ORME, PHILIBERT (*c.* 1510-1570), French architect, one of the great masters of the Renaissance, was born at Lyons, the son of Jehan de L'Orme, who practised the same art and brought his son up to it. At an early age Philibert was sent to Italy to study (1533-1536) and was employed there by Pope Paul III. Returning to France he was patronized by Cardinal du Bellay at Lyons, and was sent by him about 1540 to Paris, where 971
he began the Château de St Maur, and enjoyed royal favour; in 1545 he was made architect to Francis I. and given the charge of works in Brittany. In 1548 Henry II. gave him the supervision of Fontainebleau, Saint-Germain and the other royal buildings; but on his death (1559) Philibert fell into disgrace. Under Charles IX., however, he returned to favour, and was employed to construct the Tuileries, in collaboration with Jean Brillant. He died in Paris on the 8th of January 1570. Much of his work has disappeared, but his fame remains. An ardent humanist and student of the antique, he yet vindicated resolutely the French tradition in opposition to Italian tendencies; he was a man of independent mind and a vigorous originality. His masterpiece was the Château d'Anet (1552-1559), built for Diane de Poitiers, the plans of which are preserved in Du Cerceau's *Plus excellens bastimens de France*, though part of the building alone remains; and his designs for the Tuileries (also given by Du Cerceau), begun by Catherine de' Medici in 1565, were magnificent. His work is also seen at Chenonceaux and other famous châteaux; and his tomb of Francis I. at St Denis remains a perfect specimen of his art. He wrote two books on architecture (1561 and 1567).

See Marius Vachon, *Philibert de L'Orme* (1887); Chevalier, *Lettres et devis relatifs à la construction de Chenonceaux* (1864); Pfror, *Monographie du château d'Anet* (1867); Herbet, *Travaux de P. de L'Orme à Fontainebleau* (1890).

DELOS (mod. *Mikra Dili*, or Little Delos, to distinguish it from Megali Dili, or Great Delos), an island in the Aegean, the smallest but most famous of the Cyclades, and, according to the ancient belief, the spot round which the group arranged itself in a nearly circular form. It is a rugged mass of granite, about 3 m. long and 1 m. to ½ m. broad, about ½ m. E. of Megali Dili or Rheneia, and 2 m. W. of Myconus. Towards the centre it rises to its greatest height of 350 ft. in the steep and rocky peak of Mount Cynthus, which, though overtopped by several eminences in the neighbouring islands, is very conspicuous from the surrounding sea. It is now completely destitute of trees, but it abounds with brushwood of lentisk and cistus, and here and there affords a patch of corn-land to the occasional sower from Myconus.

I. *Archaeology.*—Excavations have been made by the French School at Athens upon the island of Delos since 1877, chiefly by Th. Homolle. They have proceeded slowly but systematically, and the method adopted, though scientific and economical, left the site in some apparent confusion, but the débris have more recently been cleared away to a considerable extent. The complete plan of the sacred precinct of Apollo has been recovered, as well as those of a considerable portion of the commercial quarter of Hellenistic and Roman times, of the theatre, of the temples of the foreign gods, of the temples on the top of Mount Cynthus, and of several very interesting private houses. Numerous works of sculpture of all periods have been found, and also a very extensive series of inscriptions, some of them throwing much light upon the subject of temple

administration in Greece.



The most convenient place for landing is protected by an ancient mole; it faces the channel between Delos and Rheneia, and is about opposite the most northerly of the two little islands now called Ῥευματιάρι. From this side the sacred precinct of Apollo is approached by an avenue flanked by porticoes, that upon the seaside bearing the name of Philip V. of Macedon, who dedicated it about 200 B.C. This avenue must have formed the usual approach for sacred embassies and processions; but it is probable that the space to the south was not convenient for marshalling them, since Nicias, on the occasion of his famous embassy, built a bridge from the island of Hecate (the Greater Rhevmatiari) to Delos, in order that the imposing Athenian procession might not miss its full effect. Facing the avenue were the propylaea that formed the chief entrance of the precinct of Apollo. They consisted of a gate faced on the outside with a projecting portico of four columns, on the inside with two columns *in antis*. Through this one entered a large open space, filled with votive offerings and containing a large exedra. The sacred road continued its course to the north-east corner of this open space, with the precinct of Artemis on its west side, and, on its east side, a terrace on which stood three temples. The southernmost of these was the temple of Apollo, but only its back was visible from this side. Though there is no evidence to show to whom the other two were dedicated, the fact that they faced west seems to imply that they were either dedicated to heroes or minor deities, or that they were treasuries. Beyond them a road branches to the right, sweeping round in a broad curve to the space in front of the temple of Apollo. The outer side of this curve is bounded by a row of treasuries, similar to those found at Delphi and Olympia, and serving to house the more costly offerings of various islands or cities. The space to the east and south of the temple of Apollo could also be approached directly from the propylaea of entrance, by turning to the right through a passage-like building with a porch at either end. Just to the north of this may be seen the basis of the colossal statue of Apollo dedicated by the Naxians, with its well-known archaic inscription; two large fragments of the statue itself may still be seen a little farther to the north.

The temple of Apollo forms the centre of the whole precinct, which it dominates by the height of its steps as well as of the terrace already mentioned; its position must have been more commanding in ancient times than it is now that heaps of earth and débris cover so much of the level. The temple was of Doric style, with six columns at the front and back and thirteen at the sides; it was built early in the 4th century B.C.; little if any traces have been found of the earlier building which it superseded. Its sculptural decoration appears to have been but scanty; the metopes were plain. The groups which ornamented, as acroteria, the two gables of the temple have been in part recovered, and may now be seen in the national museum at Athens; at the one end was Boreas carrying off Oreithyia, at the other Eos and Cephalus, the centre in each case being occupied by the winged figure that stood out against the sky—a variation on the winged Victories that often occupy the same position on temples.

To the east of the space in front of the temple was an oblong building of two chambers, with a colonnade on each side but not in front; this may have been the Prytaneum or some other official building; beyond it is the most interesting and characteristic of all the monuments of Delphi. This is a long narrow hall, running from north to south, and entered by a portico at its south end. At the north end was the famous altar, built out of the horns of the victims, which was sometimes reckoned among the seven wonders of the world. The rest of the room is taken up by a paved space, surrounded by a narrow gangway; and on this it is supposed that the γέρανος or stork-dance took place. The most remarkable architectural feature of the building is the partition

that separated the altar from this long gallery; it consists of two columns between *antae*, with capitals of a very peculiar form, consisting of the fore parts of bulls set back to back; from these the whole building is sometimes called the sanctuary of the bulls. Beyond it, on the east, was a sacred wood filling the space up to the wall of the precinct; and at the south end of this was a small open space with the altar of Zeus Polieus.

At the north of the precinct was a broad road, flanked with votive offerings and exedrae, and along the boundary were porticoes and chambers intended for the reception of the θεωρίαι or sacred embassies; there are two entrances on this side, each of them through extensive propylaea.

At the north-west corner of the precinct is a building of limestone, the πώρινος οἶκος often mentioned in the inventories of the treasures of the Delian shrine. South of it is the precinct of Artemis, containing within it the old temple of the goddess; her more recent temple was to the south of her precinct, opening not into it but into the open space entered through the southern propylaea of the precinct of Apollo. The older temple is mentioned in some of the inventories as “the temple in which were the seven statues”; and close beside it was found a series of archaic draped female statues, which was the most important of its kind until the discovery of the finer and better preserved set from the Athenian Acropolis.

Within the precinct there were found many statues and other works of art, and a very large number of inscriptions, some of them giving inventories of the votive offerings and accounts of the administration of the temple and its property. The latter are of considerable interest, and give full information as to the sources of the revenue and its financial administration.

Outside the precinct of Apollo, on the south, was an open place; between this and the precinct was a house for the priests, and within it, in a kind of court, a set of small structures that may perhaps be identified as the tombs of the Hyperborean maidens. Just to the east was the temple of Dionysus, which is of peculiar plan, and faces the open place; on the other side of it is a large rectangular court, surrounded by colonnades and chambers which served as offices, the whole forming a sort of commercial exchange; in the middle of it was a temple dedicated to Aphrodite and Hermes.

To the north of the precinct of Apollo, between it and the sacred lake, there are very extensive ruins of the commercial town of Delos; these have been only partially cleared, but have yielded a good many inscriptions and other antiquities. The most extensive building is a very large court surrounded by chambers, a sort of club or exchange. Beyond this, on the way to the east coast, are the remains of the new and the old palaestra, also partially excavated.

The shore of the channel facing Rheneia is lined with docks and warehouses, and behind them, as well as elsewhere in the island, there have been found several private houses of the 2nd or 3rd century B.C. Each of these consists of a single court surrounded by columns and often paved with mosaic; various chambers open out of the court, including usually one of large proportions, the ἀνδρών or dining-room for guests.

The theatre, which is set in the lower slope of Mount Cynthus, has the wings of the auditorium supported by massive substructures. The most interesting feature is the *scena*, which is unique in plan; it consisted of an oblong building of two storeys, surrounded on all sides by a low portico or terrace reaching to the level of the first floor. This was supported by pillars, set closer together along the front than at the sides and back. An inscription found in the theatre showed that this portico, or at least the front portion of it, was called the proscenium or logeum, two terms of which the identity was previously disputed.

On the summit of Mount Cynthus, above the primitive cave-temple which has always been visible, there have been found the remains of a small precinct dedicated to Zeus Cynthius and Athena Cynthia. Some way down the slope of the hill, between the cave-temple and the ravine of the Inopus, is a terrace with the temples of the foreign gods, Isis and Serapis, and a small odeum.

II. *History.*—Many alternative names for Delos are given by tradition; one of these, Ortygia, is elsewhere also assigned to an island sacred to Artemis. Of the various traditions that were current among the ancient Greeks regarding the origin of Delos, the most popular describes it as drifting through the Aegean till moored by Zeus as a refuge for the wandering Leto. It supplied a birthplace to Apollo and Artemis, who were born beneath a palm tree beside its sacred lake, and became for ever sacred to these twin deities. The island first appears in history as the seat of a great Ionic festival to which the various Ionic states, including Athens, were accustomed annually to despatch a sacred embassy, or Theoria, at the anniversary of the birth of the god on the 7th of Thargelion (about May). In the 6th century B.C. the influence of the Delian Apollo was at its height; Polycrates of Samos dedicated the neighbouring island of Rheneia to his service and Peisistratus of Athens caused all the area within sight of the temple to be cleared of the tombs by which its sanctity was impaired. After the Persian wars, the predominance of Athens led to the transformation of the Delian amphictyony into the Athenian empire. (See Delian League.) In 426 B.C., in connexion with a reorganization of the festival, which henceforth was celebrated in the third year of every Olympiad, the Athenians instituted a more elaborate lustration, caused every tomb to be removed from the island, and established a law that ever after any one who was about to die or to give birth to a child should be at once conveyed from its shores. And even this was not accounted sufficient, for in 422 they expelled all its secular inhabitants, who were, however, permitted to return in the following year. At the close of the Peloponnesian War the Spartans gave to the people of Delos the management of their own affairs; but the Athenian predominance was soon after restored, and survived an appeal to the amphictyony of Delphi in 345 B.C. During Macedonian times, from 322 to 166 B.C., Delos again became independent; during this period the shrine was enriched by offerings from all quarters, and the temple and its possessions were administered by officials called ἱεροποιοί. After 166 B.C. the Romans restored the control of Delian worship to Athens, but granted to the island various commercial privileges which brought it great prosperity. In 87 B.C. Menophanes, the general of Mithradates VI. of Pontus, sacked the island, which had remained faithful to Rome. From this blow it never recovered; the Athenian control was resumed in 42 B.C., but Pausanias (viii. 33. 2) mentions Delos as deserted but for a few Athenian officials; and several epigrams of the 1st or 2nd century A.D. attest the same fact, though the temple and worship were probably kept up until the official extinction of the ancient religion. A museum has now been built to contain the antiquities found in the excavations; otherwise Delos is now uninhabited, though during

the summer months a few shepherds cross over with their flocks from Myconus or Rheneia. As a religious centre it is replaced by Tenos and as a commercial centre by the flourishing port of Syra.

See Lebègue, *Recherches sur Délos* (Paris, 1876). Numerous articles in the *Bulletin de correspondance hellénique* record the various discoveries at Delos as they were made. See also Th. Homolle, *Les Archives de l'intendance sacrée à Délos* (with plan). The best consecutive account is given in the *Guide Joanne, Grèce*, ii. 443-464. For history, see Sir R. C. Jebb, *Journal of Hellenic Studies*, i. (1889), pp. 7-62. For works of art found at Delos see GREEK ART.

(E. GR.)

DE LOUTHERBOURG, PHILIP JAMES (1740-1812), English artist, was born at Strassburg on the 31st of October 1740, where his father, the representative of a Polish family, practised miniature painting; but he spent the greater part of his life in London, where he was naturalized, and exerted a considerable influence on the scenery of the English stage, as well as on the artists of the following generation. De Loutherbourg was intended for the Lutheran ministry, and was educated at the university of Strassburg. As the calling, however, was foreign to his nature, he insisted on being a painter, and placed himself under Vanloo in Paris. The result was an immediate and precocious development of his powers, and he became a figure in the fashionable society of that day. In 1767 he was elected into the French Academy below the age required by the law of the institution, and painted landscapes, sea storms, battles, all of which had a celebrity above those of the specialists then working in Paris. His début was made by the exhibition of twelve pictures, including "Storm at Sunset," "Night," "Morning after Rain." He is next found travelling in Switzerland, Germany and Italy, distinguishing himself as much by mechanical inventions as by painting. One of these, showing quite new effects produced in a model theatre, was the wonder of the day. The exhibition of lights behind canvas representing the moon and stars, the illusory appearance of running water produced by clear blue sheets of metal and gauze, with loose threads of silver, and so on, were his devices. In 1771 he came to London, and was employed by Garrick, who offered him £500 a year to apply his inventions to Drury Lane, and to superintend the scene-painting, which he did with complete success, making a new era in the adjuncts of the stage. Garrick's own piece, the *Christmas Tale*, and the pantomime, 1781-1782, introduced the novelties to the public, and the delight not only of the masses, but of Reynolds and the artists, was unbounded. The green trees gradually became russet, the moon rose and lit the edges of passing clouds, and all the world was captivated by effects we now take little notice of. A still greater triumph awaited him on his opening an entertainment called the "Eidophusicon," which showed the rise, progress and result of a storm at sea—that which destroyed the great Indiaman, the "Halsewell,"—and the Fallen Angels raising the Palace of Pandemonium. De Loutherbourg has been called the inventor of the panorama, but this honour does not belong to him, although it first appeared about the same time as the eidophusicon. The first panorama was painted and exhibited by Robert Barker.

All this mechanism did not prevent De Loutherbourg from painting. "Lord Howe's Victory off Ushant" (1794), and other large naval pictures were commissioned for Greenwich Hospital Gallery, where they still remain. His finest work was the "Destruction of the Armada." He painted also the Great Fire of London, and several historical works, one of these being the "Attack of the Combined Armies on Valenciennes" (1793). He was made R.A., in addition to other distinctions, in 1781, shortly after which date we find an entirely new mental impulse taking possession of him. He joined Balsamo, comte de Cagliostro, and travelled about with this extraordinary person—leaving him, however, before his condemnation to death. We do not hear that Mesmer had attracted De Loutherbourg, nor do we find an exact record of his connexion with Cagliostro. A pamphlet published in 1789, *A List of a few Cures performed by Mr and Mrs De Loutherbourg without Medicine*, shows that he had taken up faith-healing, and there is a story that a successful projection of the philosopher's stone was only spoiled by the breaking of the crucible by a relative. He died on the 11th of March 1812. His publications are few—some sets of etchings, and *English Scenery* (1805).

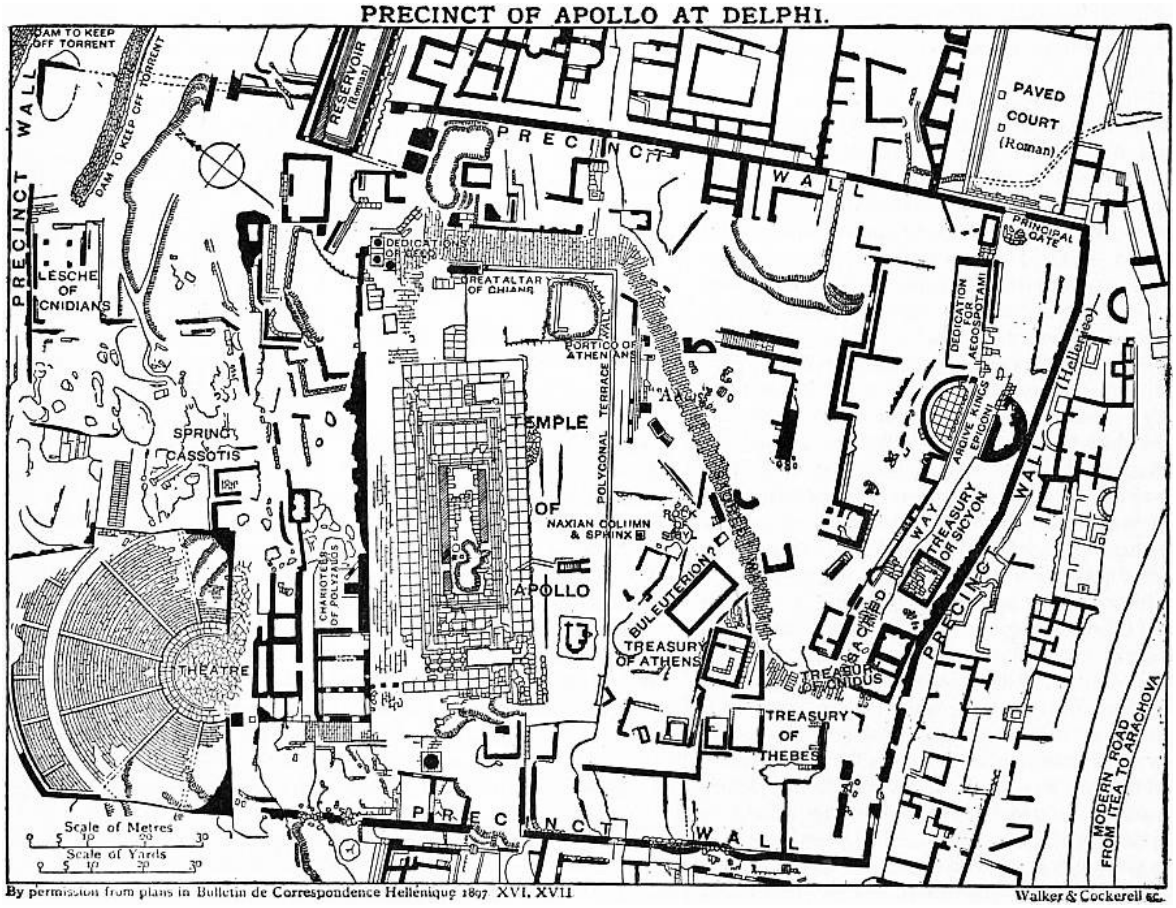
DELPHI (the Pytho of Homer and Herodotus; in Boeotian inscriptions Βελφοί, on coins Δαλφοί), a place in ancient Greece in the territory of Phocis, famous as the seat of the most important temple and oracle of Apollo. It was situated about 6 m. inland from the shores of the Corinthian Gulf, in a rugged and romantic glen, closed on the N. by the steep wall-like under-cliffs of Mount Parnassus known as the Phaedriades or Shining Rocks, on the E. and W. by two minor ridges or spurs, and on the S. by the irregular heights of Mount Cirphis. Between the two mountains the Pleistus flowed from east to west, and opposite the town received the brooklet of the Castalian fountain, which rose in a deep gorge in the centre of the Parnassian cliff. About 7 m. to the north, on the side of Mount Parnassus, was the famous Corycian cave, a large grotto in the limestone rock, which afforded the people of Delphi a refuge during the Persian invasion. It is now called in the district the Sarant' Aulai or Forty Courts, and is said to be capable of holding 3000 people.

I. *The Site.*—The site of Delphi was occupied by the modern village of Castri until it was bought by the French government in 1891, and the peasant proprietors expropriated and transferred to the new village of Castri, a little farther to the west. Excavations had been made previously in some parts of the precinct; for example, the portico of the Athenians was laid bare in 1860. The systematic clearing of the site began in the spring of 1892, and it was rapidly cleared of earth by means of a light railway. The plan of the precinct is now easily traced, and with the help of Pausanias many of the buildings have been identified.

The ancient wall running east and west, commonly known as the Hellenico, has been found extant in its whole length, and the two boundary walls running up the hill at each end of it, traced. In the eastern of these was the main entrance by which Pausanias went in along the Sacred Way. This paved road is easily recognized as it zigzags up the hill, with treasuries and the bases of various offerings facing it on both sides. It mounts first westwards to an open space, then turns eastwards till it reaches the eastern end of the terrace wall that supports the temple, and then turns again and curves up north and then west towards the temple. Above this, approached by a stair, are the Lesche and the theatre, occupying respectively the north-east and north-west corner of the precinct. On a higher level still, a little to the west, is the stadium. There are several narrow paths and stairs that cut off the zigzags of the Sacred Way.

In describing the monuments discovered by the French excavators, the simplest plan is to follow the route of Pausanias. Outside the entrance is a large paved court of Roman date, flanked by a colonnade. On the north side of the Sacred Way, close to the main entrance, stood the offering dedicated by the Lacedaemonians after the battle of Aegospotami. It was a large quadrangular building of conglomerate, with a back wall faced with stucco, and stood open to the road. On a stepped pedestal facing the open stood the statues of the gods and the admirals, perhaps in rows above one another.

The statues of the Epigoni stood on a semicircular basis on the south side of the way. Opposite them stood another semicircular basis which carried the statues of the Argive kings, whose names are cut on the pedestal in archaic characters, reading from right to left. Farther west was the Sicyonian treasury on the south of the way. It was in the form of a small Doric temple *in antis*, and had its entrance on the east. The present foundations are built of architectural fragments, probably from an earlier building of circular form on the same site. The sculptures from this treasury are in the museum, as are the other sculptures found on the site. These sculptures, which are in rough limestone, most likely belong to the earlier building, as their surface is in a better state of preservation than could be possible if they had been long exposed to the air. The earlier treasury was probably destroyed either by earthquake or by the percolation of water through the terracing.



The Cnidian treasury stands on the south side of the way farther west. This building was originally surmised by the excavators to be the treasury of Siphnos, but further evidence led them to change their opinion. The treasury was raised on a quadrangular structure, supported on its south side by the Hellenico, and built of tufa. The lower courses are left rough and were most likely hidden. A small Ionic temple of marble with two caryatids between antae stood on this substructure. The sculpture from this treasury, which ornamented its frieze and pediment, is of great interest in the history of the development of the art, and the fragments of architectural mouldings are of great delicacy and beauty. The whole work is perhaps the most perfect example we possess of the transitional style of the early 5th century. Standing back somewhat from the path just as it bends round up the hill is the Theban treasury. Farther north, where the path turns again, is the Athenian treasury. This structure, which was in the form of a small Doric temple *in antis*, appears to have suffered from the building above it having been shaken down by an earthquake. It has now been rebuilt with the original blocks. There can be no doubt about the identity of the building, for the basis on which it stands bears the remains of the dedicatory inscription, stating that it was erected from the spoils of Marathon. Almost all the sculptured metopes are in the museum, and are of the highest interest to the student of archaic art. The famous inscriptions with hymns to Apollo accompanied by musical notation were

found on stones belonging to this treasury.

Above the Athenian treasury is an open space, in which is a rock which has been identified as the Sybil's rock. It has steps hewn in it, and has a cleft. The ground round it has been left rough like the space on the Acropolis at Athens identified as the ancient altar of Athena. Here too was placed the curious column, with many flutes and an Ionic capital, on which stood the colossal sphinx, dedicated by the Naxians, that has been pieced together and placed in the museum.

A little farther on, but below the Sacred Way, is another open space, of circular form, which is perhaps the ἄλως or sacred threshing-floor on which the drama of the slaying of the Python by Apollo was periodically performed. Opposite this space, and backed against the beautifully jointed polygonal wall which has for some time been known, and which supports the terrace on which the temple stands, is the colonnade of the Athenians. A dedicatory inscription runs along the face of the top step, and has been the subject of much dispute. Both the forms of the letters and the style of the architecture show that the colonnade cannot date, as Pausanias says, from the time of the Peloponnesian War; Th. Homolle now assigns it to the end of the 6th century. The polygonal terrace wall at the back, on being cleared, proves to be covered with inscriptions, most of them concerning the manumission of slaves.

After rounding the east end of the terrace wall, the Sacred Way turns northward, leaving the Great Altar, dedicated by the Chians, on the left. After passing the altar, it turns to the left again at right angles, and so enters the space in front of the temple. Remains of offerings found in this region include those dedicated by the Cyrenians and by the Corinthians. The site of the temple itself carries the remains of successive structures. Of that built by the Alcmaeonids in the 6th century B.C. considerable remains have been found, some in the foundations of the later temple and some lying where they were thrown by the earthquake. The sculptures found have been assigned to this building, probably to the gables, as they are archaic in character, and show a remarkable resemblance to the sculptures from the pediment of the early temple of Athena at Athens. The existing foundations are these of the temple built in the 4th century. They give no certain information as to the sacred cleft and other matters relating to the oracle. Though there are great hollow spaces in the structure of the foundations, these appear merely to have been intended to save material, and not to have been put to any religious or other use. Up in the north-eastern corner of the precinct, standing at the foot of the cliffs, are the remains of the interesting Cnidian Lesche or Clubhouse. It was a long narrow building accessible only from the south, and the famous paintings were probably disposed around the walls so as to meet in the middle of the north side. Some scanty fragments of the lower part of the frescoed walls have survived; but they are not enough to give any information as to the work of Polygnotus.

At the north-western corner of the precinct is the theatre, one of the best preserved in Greece. The foundations of the stage are extant, as well as the orchestra, and the walls and seats of the auditorium. There are thirty-three tiers of seats in seven sets, and a paved diazoma. The sculptures from the stage front, now in the museum, have the labours of Heracles as their subject. The date of the theatre is probably early 2nd century B.C. 975

The stadium lies, as Pausanias says, in the highest part of the city to the north-west. It stands on a narrow plateau of ground supported on the south-east by a terrace wall. The seats have been cleared, and are in a state of extraordinary preservation. A few of those at the east end are hewn in the rock. No trace of the marble seats mentioned by Pausanias has been found, but they have probably been carried off for lime or building, as they could easily be removed. An immense number of inscriptions have been found in the excavations, and many works of art, including a bronze charioteer, which is one of the most admirable statues preserved from ancient times.

II. *History.*—Our information as to the oracle at Delphi and the manner in which it was consulted is somewhat confused; there probably was considerable variation at different periods. The tale of a hole from which intoxicating "mephitic" vapour arose has no early authority, nor is it scientifically probable (see A. P. Oppé in *Journal of Hellenic Studies*, xxiv. 214). The questions had to be given in writing, and the responses were uttered by the Pythian priestess, in early times a maiden, later a woman over fifty attired as a maiden. After chewing the sacred bay and drinking of the spring Cassotis, which was conducted into the temple by artificial channels, she took her seat on the sacred tripod in the inner shrine. Her utterances were reduced to verse and edited by the prophets and the "holy men" (ὅσιοι). For the influence and history of the oracle see Oracle.

Delphi also contained the "Omphalos," a sacred stone bound with fillets, supposed to mark the centre of the earth. It was said Zeus had started two eagles from the opposite extremities and they met there. Other tales said the stone was the one given by Rhea to Cronus as a substitute for Zeus.

For the history of the Delphic Amphictyony see under Amphictyony. The oracle at Delphi was asserted by tradition to have existed before the introduction of the Apolline worship and to have belonged to the goddess Earth (Ge or Gaia). The Homeric Hymn to Apollo evidently combines two different versions, one of the approach of Apollo from the north by land, and the other of the introduction of his votaries from Crete. The earliest stone temple was said to have been built by Trophonius and Agamedes. This was destroyed by fire in 548 B.C., and the contract for rebuilding was undertaken by the exiled Alcmaeonidae from Athens, who generously substituted marble on the eastern front for the poros specified (see Cleisthenes, *ad init.*). Portions of the pediments of this temple have been found in the excavations; but no sign has been found of the pediments mentioned by Pausanias, representing on the east Apollo and the Muses, and on the west Dionysus and the Thyiades (Bacchantes), and designed by Praxias, the pupil of Calanias. The temple which was seen by Pausanias, and of which the foundations were found by the excavators, was the one of which the building is recorded in inscriptions of the 4th century. A raid on Delphi attempted by the Persians in 480 B.C. was said to have been frustrated by the god himself, by means of a storm or earthquake which hurled rocks down on the invaders; a similar tale is told of the raid of the Gauls in 279 B.C. But the sacrilege thus escaped at the hands of foreign invaders was inflicted by the Phocian defenders of Delphi during the Sacred War, 356-346 B.C., when many of the precious votive offerings were melted down. The Phocians were condemned to replace their value to the amount of 10,000 talents, which they paid in instalments. In 86 B.C. the sanctuary and its

treasures were put under contribution by L. Cornelius Sulla for the payment of his soldiers; Nero removed no fewer than 500 bronze statues from the sacred precincts; Constantine the Great enriched his new city by the sacred tripod and its support of intertwined snakes dedicated by the Greek cities after the battle of Plataea. This still exists, with its inscription, in the Hippodrome at Constantinople. Julian afterwards sent Oribasius to restore the temple; but the oracle responded to the emperor's enthusiasm with nothing but a wail over the glory that had departed.

Provisional accounts of the excavations have appeared during the excavations in the *Bulletin de correspondance hellénique*. A summary is given in J. G. Frazer, *Pausanias*, vol. v. The official account is entitled *Fouilles de Delphes*. For history see Hiller von Gärtringen in Pauly-Wissowa, *Realencyclopädie, s.v.* "Delphi." For cult see L. R. Farnell, *Cults of the Creek States*, iv. 179-218. For the works of art discovered see Greek Art.

(E. Gr.)

DELPHINIA, a festival of Apollo Delphinius held annually on the 6th (or 7th) of the month Munychion (April) at Athens. All that is known of the ceremonies is that a number of girls proceeded to his temple (Delphinium) carrying suppliants' branches and seeking to propitiate Apollo, probably as a god having influence on the sea. It was at this time of year that navigation began again after the storms of winter. According to the story in Plutarch (*Theseus*, 18), Theseus, before setting out to Crete to slay the Minotaur, repaired to the Delphinium and deposited, on his own behalf and that of his companions on whom the lot had fallen, an offering to Apollo, consisting of a branch of consecrated olive, bound about with white wool; after which he prayed to the god and set sail. The sending of the maidens to propitiate the god during the Delphinia commemorates this event in the life of Theseus.

See A. Mommsen, *Festeder Stadt Athen* (1898); L. Preller, *Griechische Mythologie* (4th ed., 1887); P. Stengel, *Die griechische Kultusaltertümer* (1898); Daremberg and Saglio, *Dictionnaire des antiquités*; G. F. Schömann, *Griechische Altertümer* (4th ed., 1897-1902).

DELPHINUS ("The Dolphin"), in astronomy, a constellation of the northern hemisphere, mentioned by Eudoxus (4th century B.C.) and Aratus (3rd century B.C.); and catalogued by Ptolemy (10 stars), Tycho Brahe (10 stars), and Hevelius (14 stars), Γ *Delphini* is a double star: a yellowish of magnitude 4, and a bluish of magnitude 5.

DELTA (from the shape of the Gr. letter Δ, delta, originally used of the mouth of the Nile), a tract of land enclosed by the diverging branches of a river's mouth and the seacoast, and traversed by other branches of the stream. This triangular tract is formed from the fine silt brought down in suspension by a muddy river and deposited when the river reaches the sea. When tidal currents are feeble, the delta frequently advances some distance seawards, forming a local prolongation of the coast.

DELUC, JEAN ANDRÉ (1727-1817), Swiss geologist and meteorologist, born at Geneva on the 8th of February 1727, was descended from a family which had emigrated from Lucca and settled at Geneva in the 15th century. His father, François Deluc, was the author of some publications in refutation of Mandeville and other rationalistic writers, which are best known through Rousseau's humorous account of his ennui in reading them; and he gave his son an excellent education, chiefly in mathematics and natural science. On completing it he engaged in commerce, which principally occupied the first forty-six years of his life, without any other interruption than that which was occasioned by some journeys of business into the neighbouring countries, and a few scientific excursions among the Alps. During these, however, he collected by degrees, in conjunction with his brother Guillaume Antoine, a splendid museum of mineralogy and of natural history in general, which was afterwards increased by his nephew J. André Deluc (1763-1847), who was also a writer on geology. He at the same time took a prominent part in politics. In 1768 he was sent to Paris on an embassy to the duc de Choiseul, whose friendship he succeeded in gaining. In 1770 he was nominated one of the Council of Two Hundred. Three years later unexpected reverses in business made it advisable for him to quit his native town, which he only revisited once for a few days. The change was welcome in so far as it set him entirely free for scientific pursuits, and it was with little regret that he removed to England in 1773. He was made a fellow of the Royal Society in the same year, and received the appointment of reader to Queen Charlotte, which he continued to hold for forty-four years, and which afforded him both leisure and a competent income. In the latter part of his life he obtained leave to make several tours in Switzerland,

France, Holland and Germany. In Germany he passed the six years from 1798 to 1804; and after his return he undertook a geological tour through England. When he was at Göttingen, in the beginning of his German tour, he received the compliment of being appointed honorary professor of philosophy and geology in that university; but he never entered upon the active duties of a professorship. He was also a correspondent of the Academy of Sciences at Paris, and a member of several other scientific associations. He died at Windsor on the 7th of November 1817.

His favourite studies were geology and meteorology. The situation of his native country had naturally led him to contemplate the peculiarities of the earth's structure, and the properties of the atmosphere, as particularly displayed in mountainous countries, and as subservient to the measurement of heights. According to Cuvier, he ranked among the first geologists of his age. His principal geological work, *Lettres physiques et morales sur les montagnes el sur l'histoire de la terre et de l'homme*, first published in 1778, and in a more complete form in 1779, was dedicated to Queen Charlotte. It dealt with the appearance of mountains and the antiquity of the human race, explained the six days of the Mosaic creation as so many epochs preceding the actual state of the globe, and attributed the deluge to the filling up of cavities supposed to have been left void in the interior of the earth. He published later an important series of volumes on geological travels in the north of Europe (1810), in England (1811), and in France, Switzerland and Germany (1813). These were translated into English.

Deluc's original experiments relating to meteorology were valuable to the natural philosopher; and he discovered many facts of considerable importance relating to heat and moisture. He noticed the disappearance of heat in the thawing of ice about the same time that J. Black founded on it his ingenious hypothesis of latent heat. He ascertained that water was more dense about 40° F. (4° C.) than at the temperature of freezing, expanding equally on each side of the maximum; and he was the originator of the theory, afterward readvanced by John Dalton, that the quantity of aqueous vapour contained in any space is independent of the presence or density of the air, or of any other elastic fluid.

His *Recherches sur les modifications de l'atmosphère* (2 vols. 4to, Geneva, 1772; 2nd ed., 4 vols. 8vo, Paris, 1784) contains many accurate and ingenious experiments upon moisture, evaporation and the indications of hygrometers and thermometers, applied to the barometer employed in determining heights. In the *Phil. Trans.*, 1773, appeared his account of a new hygrometer, which resembled a mercurial thermometer, with an ivory bulb, which expanded by moisture, and caused the mercury to descend. The first correct rules ever published for measuring heights by the barometer were those he gave in the *Phil. Trans.*, 1771, p. 158. His *Lettres sur l'histoire physique de la terre* (8vo, Paris, 1798), addressed to Professor Blumenbach, contains an essay on the existence of a General Principle of Morality. It also gives an interesting account of some conversations of the author with Voltaire and Rousseau. Deluc was an ardent admirer of Bacon, on whose writings he published two works—*Bacon tel qu'il est* (8vo, Berlin, 1800), showing the bad faith of the French translator, who had omitted many passages favourable to revealed religion, and *Précis de la philosophie de Bacon* (2 vols. 8vo, Paris, 1802), giving an interesting view of the progress of natural science. *Lettres sur le Christianisme* (Berlin and Hanover, 1801, 1803) was a controversial correspondence with Dr Teller of Berlin in regard to the Mosaic cosmogony. His *Traité élémentaire de géologie* (8vo, Paris, 1809, also in English, by de la Fite, the same year) was principally intended as a refutation of the Vulcanian system of Hutton and Playfair, who deduced the changes of the earth's structure from the operation of fire, and attributed a higher antiquity to the present state of the continents than is required in the Neptunian system adopted by Deluc after D. Dolomieu. He sent to the Royal Society, in 1809, a long paper on separating the chemical from the electrical effect of the pile, with a description of the electric column and aerial electroscope, in which he advanced opinions so little in unison with the latest discoveries of the day, that the council deemed it inexpedient to admit them into the *Transactions*. The paper was afterwards published in Nicholson's *Journal* (xxvi.), and the dry column described in it was constructed by various experimental philosophers. This dry pile or electric column has been regarded as his chief discovery.

Many other of his papers on subjects kindred to those already mentioned are to be found in the *Transactions* and in the *Philosophical Magazine*. See *Philosophical Magazine* (November 1817).

DELUGE, THE (through the Fr. from Lat. *diluvium*, flood, *diluere*, to wash away), a great flood or submersion of the earth (so far as the earth was known to the narrators), or of heaven and earth, or simply of heaven, by which, according to primitive and semi-primitive races, chaos was restored. It is, of course, not meant that all the current flood stories, as they stand, answer to this description. There are flood stories which, at first sight, may plausibly be held to be only exaggerated accounts of some ancient historical occurrences. The probability of such traditions being handed down is, however, extremely slight. If some flood stories are apparently local, and almost or quite without mythical colouring, it may be because the original myth-makers had a very narrow conception of the earth, and because in the lapse of time the original mythic elements had dwindled or even disappeared. The relics of the traditional story may then have been adapted by scribes and priests to a new theory. Many deluge stories may in this way have degenerated. It is at any rate undeniable that flood stories of the type described above, and even with similar minor details, are fairly common. A conspectus of illustrative flood stories from different parts of the world would throw great light on the problems before us; see the article Cosmogony, especially for the North American tales, which show clearly enough that the deluge is properly a second creation, and that the serpent is as truly connected with the second chaos as with the first. One of them, too, gives a striking parallel to the Babylonian name Ḫasis-andra (the Very Wise), whence comes the corrupt form Xisuthrus; the deluge hero of the Hare Indians is called Kunyan, "the intelligent." Polynesia also gives us most welcome assistance, for its flood stories still present clear traces of the primitive imagination that the sky was a great blue sea, on which the sun, moon and stars (or constellations) were voyagers. Greece too supplies some stimulus to thought, nor are Iran and

Egypt as unproductive as some have supposed. But the only pauses that we can allow ourselves are in Hindustan, Babylonia and Canaan. The peoples of these three countries, which are religiously so prominent in antiquity, have naturally connected their name equally with thoughts about earth production and earth destruction.

Indian Tradition.

The Indian tradition exists in several forms.[1] The earliest is preserved in the Satapatha Brahmana. It is there related that Manu, the first man, the son of the sun-god Vivasvat, found, in bathing, a small fish, which asked to be tended, and in reward promised to save him in the coming flood. The fish grew, and at last had to be carried to the sea, where it revealed to Manu the time of the flood, and bade him construct a ship for his deliverance. When the time came, Manu, unaccompanied, went on board; the grateful fish towed the ship through the water to the summit of the northern mountain, where it bade Manu bind the vessel to a tree. Gradually, as the waters fell, Manu descended the mountain; he then sacrificed and prayed. In a year's time his prayer was granted. A woman appeared, who called herself his daughter Idā (goddess of fertility). It is neither stated, nor even hinted, that sin was the cause of the flood.

Another version occurs in the great epic, the Mahābhārata. The lacunae of the earlier story are here supplied. Manu, for instance, embarks with the seven "rishis" or wise men, and takes with him all kinds of seed. The fish announces himself as the God Brahman, and enables Manu to create both gods and men. A third account is given in the Bhāgavata Purāna. It contains the details of the announcement of the flood seven days beforehand (cf. Gen. vii. 4) and of the taking of pairs of all kinds of animals (cf. Gen. vi. 19), besides the seeds of plants (as the epic; cf. Gen. vi. 21). This story, however, is a late composition, not earlier than the 12th century A.D. A first glance at these stories is somewhat bewildering. We shall return, however, to this problem later with a good hope of mastering it.

Israelite and Babylonian.

The Israelite (Biblical) and the Babylonian deluge-stories remain to be considered. Neither need be described here in detail; for the former see Gen. vi. 5-ix. 17, and for the latter Gilgamesh. As most students are aware, the Biblical deluge-story is composite, being made up of two narratives, the few lacunae in which are due to the ancient redactor who worked them together.[2] The narrators are conventionally known as J. (= the Yahwist, from the divine name Yahweh) and P. (= the Priestly Writer) respectively. It is important to notice that P., though chronologically later than J., reproduces certain elements which must be archaic. For instance, while J. speaks only of a rain-storm, P. states that "all the fountains of the great ocean were broken up, and the windows of heaven opened" (Gen. vii. 11), *i.e.* the lower and the upper waters met together and produced the deluge. It is also P. who tells the story of the appointment of the rainbow (Gen ix. 12-17), which is evidently ancient, though only paralleled in a Lithuanian flood-story, and near it we find the divine declaration (Gen. ix. 2-6) that the golden age of universal peace (cf. Gen. i. 29, 30), already sadly tarnished, is over.[3] Surely this too has a touch of the archaic; nor can we err in connecting it with the tradition of man's first home in Paradise, where no enemy could come, because, in the original form of the tradition, Paradise was the abode of God. (See Paradise.)

Berōssus: four points.

The Babylonian tradition exists in two main forms,[4] nor can we affirm that the shorter form, due to Berōssus, is superseded by the larger one in the Gilgamesh epic, for it communicates four important points: (1) Xisuthrus, the hero of the deluge, was also the tenth Babylonian king; cf. Noah, in P., the tenth patriarch as well as the survivor from the deluge; (2) the destination of Xisuthrus is said to be "to the gods," a statement which virtually records his divine character. In accordance with this, the final reward of the hero is declared to be "living with the gods." This suggests that Noah (?) may originally have been represented as a supernatural man, a demigod. True, Gen. ix. 20, 21 is not consistent with this, but it is very possible that Noah was substituted by a scribe's error for Enoch,[5] who, like Xisuthrus, "walked with God (learning the heavenly wisdom) and disappeared, for God had taken him" (Gen. v. 22, 24); (3) the birds, when sent out by Xisuthrus the second time, return with mud on their feet. This detail reminds us of points in some archaic North American myths which probably supply the key to its meaning;[6] (4) in the time of Berōssus the mountain on which the ark grounded was considered to be in Armenia.

Details on relation of Israelite story to Babylonian.

We pass on to the relation of J. and P. to the Babylonian story. (1) The polytheistic colouring of the latter contrasts strongly with the far simpler religious views of J. and P. Note the capricious character of the god Bel who sends the deluge, while at the end of the story the catastrophe is represented as a judgment upon human sins. It is the latter view which is adopted by J. and P. We cannot, however, infer from this that the narratives which doubtless underlie J. and P. were directly taken from some such story as that in the Gilgamesh epic. The theory of an indirect and unconscious borrowing on the part of the Israelitish compilers will satisfy all the conditions of the case. (2) In the general scheme the three accounts very nearly agree, for J. must originally have contained directions as to the building of the vessel, and a notice that the ark grounded on a certain mountain. P.'s omission of the sacrifice at the close seems to be arbitrary. His theory of religious history forbade a reference to an altar so early, but his document must have contained it. J. expressly mentions it (Gen. viii. 20, 21), though not in such an original way as the cuneiform text. (3) As to the directions for building the ship (epic) or chest (J. and P.). Here the Babylonian story and P. have a strong general resemblance; note, *e.g.*, the mention of bitumen in both. Whether the Hebrew reference to a chest (*tēbah*) is, or is not, more archaic than the Babylonian reference to a ship (*elippu*) is a question which admits of different answers. (4) As to the material cause of the deluge. According to P. (see above) the water came both from above and from below; J. only speaks of continuous rain. The Gilgamesh epic, however, mentions besides thunder, lightning and rain, a hurricane which drove the sea upon the land. We can hardly regard this as more original than P.'s representation. (5) As to the extent of the flood. From the opening of the story in the epic we should naturally infer that only a single S. Babylonian city was affected. The sequel, however, implies that the flood extended all over Babylonia and the region of Nişir. More than this can hardly be claimed. Similarly the earlier story which underlies J. and P. need only have referred to the region of the myth-framers, *i.e.* either Canaan or N. Arabia. (6) As to the duration of the flood the traditions differ. P. reckons it at 365 days, *i.e.* a solar year, which is parallel to the 365 years of the life of Enoch (who, as we

have seen, may have been the original hero of the flood). It is probable (see below) that P.'s ultimate authority, far back in the centuries, represented the deluge as a celestial occurrence. The origin of J.'s story is not quite so clear, owing to the lacunae in the narrative. If the text may be followed, this narrator made the flood last forty days and nights, after which two periods of seven days elapse, and then the patriarch leaves the ark. The epic shortens the duration of the flood to seven days, after which the ship remains another seven days (more strictly six full days) on the mountain of the land of Niṣir (P., the mountains of Ararat; J., unrecorded). (7) As to the despatch of the birds. J. begins, the epic closes, with the raven. Clearly the epic is more original. Besides, one of the two missions of the dove is evidently superfluous. Dove, swallow, raven, as in the epic, must be more primitive than raven, dove, dove.

That the Hebrew deluge-story in both its forms has been at least indirectly influenced by the Babylonian is obvious. We cannot indeed reconstruct the form either of the Canaanitish (or N. Arabian) story, which was recast partly at least under the influence of a recast Babylonian myth, nor can we conjecture where the sanctuary was, the priests of which, yielding to a popular impulse, adopted and modified the fascinating story. But the fact of the ultimate Babylonian origin of the Israelitish narratives cannot seriously be questioned. The Canaanites or the N. Arabians handed on at least a portion of their myths to the Israelites, and the creation and deluge stories were among these. That the Israelitish priests gradually recast them is an easy and altogether satisfactory conjecture.

History and significance of deluge-myths.

It remains to ask, What is the history and significance of the deluge-myth? The question carries us into far-off times. We have no version of the Babylonian myth which goes back to about 2100 B.C., while its text was apparently derived from a still older tablet. But even this is not primitive; behind it there must have been a much shorter and simpler myth. The recast represented by the existing versions of the myth must have been produced partly by the insertion, partly by the omission or modification, of mythic details, and by the application to the story thus produced of a particular mythic theory respecting the celestial world. The shorter myth referred to may—if we take hints from the very primitive myths of N. America—have run somewhat thus, omitting minor details: "The earth (a small enough earth, doubtless) and its inhabitants proved so imperfect that the beneficent superhuman Being, who had created it, or perhaps another such Being, determined to remake it. He, therefore, summoned the serpent or dragon who controlled the cosmic ocean, and had been subjugated at creation, to overwhelm the earth, after which the creator remade it better,[7] and the survivor and his family became the ancestors of a new human race."

This, however, is only one possible representation. It may have been said that the serpent of his own accord, not having been killed by the creator, maliciously flooded the earth (cf. the Algonquian myth), but was again overcome in battle, or that the serpent, after filling the earth with violence and wrong, was at length slain by the Good Being, and that his blood, streaming, out, produced a deluge.[8] In any case it is unnatural to hold that the first flood (that which preceded creation) had a dragon, but not the second. An old cuneiform text, recopied late, however, appears to call the year of the deluge (*i.e.* of what we here call the second flood) "the year of the raging (or red-shining) serpent,"[9] and certainly the N. American myths distinctly connect serpents with the deluges.

Among the probable minor details (omitted above) of the presumed shorter and older myth we may include: (1) the warning of "Very-Wise,"[10] either by friendly animals or by a dream; (2) the construction of a chest to contain "Very-Wise," his wife and his sons, together with animals;[11] (3) the despatch of three birds with a special object (see below); (4) the landing of the survivors on a mountain. As to (1), Berōssus suggests that the notice came to Xisuthrus in a dream; in the Indian myth it is the sacred fish which warns Manu. In the archaic N. American myths, however, it is some animal which gives the notice—an eagle or a coyote (a kind of wolf). As to (2), nothing is more common than the story of a divine child cast into the sea in a box.[12] The ship-motive is also found,[13] but it is not too rash to assume that the box-motive is the earlier, and, in accordance with the parallels, that the hero of the deluge was originally a god or a demigod. The translation of the hero to be with the gods is a transparent modification of the original tradition. As to (3), the original object of sending out the birds was probably not to find out where dry land was, but to use them as helpers in the work of re-creation. Take the story of the Tlatlasik Indians, where the diving-bird (one of three sent out) comes back with a branch of a fir-tree, out of which O'meatl made mountains, earth and heaven;[14] so, too, the Caingangs relate[15] that those who escaped from the flood, as they tarried on a mountain, heard the song of the *saracura* birds, who came carrying earth in baskets, and threw it into the waters, which slowly subsided. As to (4), the mountain would naturally be thought of as a place of refuge even in the old, simple flood-story. But when Babylonian mythology effected an entrance, the mountain would receive a new and much grander significance. It would then come to represent the summit of that great and most holy mountain, which, save by the special favour of the gods, no human eye has seen.

That a didactic element entered the deluge-tradition but slowly, may be surmised, not only from the genuinely old N. American stories, but from the inconsistent statements, to which Jastrow has already referred, in the Babylonian story. We may imagine that between the creation and the deluge some great and wise Being had initiated the early men, not only in the necessary arts of life, but in the "ways" that were pleasing to the heavenly powers. The Babylonians apparently think of neglected sacrifices, the Australians of a desecrated mystery as the cause of the flood. Some such violation of a sacred rule is the origin that naturally occurs to an adapter or expander of primitive myths.

Celestial myth theory.

And now as to the application of the celestial mythic theory to the early deluge-story. In the agricultural stage it was natural that men should take a deeper interest than before in the appearance of the sky, and especially of the sun and moon, and of the constellations, even though an astrological science or quasi-science would very slowly, if at all, grow up. That the Polynesian myths (which show no vestige of science) originally referred to the supposed celestial ocean, seems to be plain. Schirren[16] regarded the New Zealand cosmogonies as myths of sunrise, and the deluge-stories as myths of sunset. We may at any rate plausibly hold, with the article "Deluge" (by Cheyne) in the ninth edition of this work[17] (1877), that the deluge-stories of Polynesia and early Babylonia (we may now

probably add India) were accommodated to an imaginative conception of the sun and moon as voyagers on the celestial ocean. "When this story had been told and retold a long time, rationalism suggested that the sea was not in heaven but on earth, and observation of the damage wrought in winter by excessive rains and the inundations of great rivers suggested the introduction of corresponding details into the new earthly deluge-myth." "This accounts for the strongly mythological character of Par-napishti (Ut-napishti) in Babylonia and Maui in New Zealand, who are in fact solar personages. Enoch, too, must be classed in this category, his perfect righteousness and superhuman wisdom now first become intelligible. Moreover, we now comprehend how the goddess Sabitu (the guardian of the entrance to the sea) can say to Gilgamesh (himself a solar personage), 'Shamash the mighty (*i.e.* the sun-god) has crossed the sea; besides (?) Shamash, who can cross it?' For though the sea in the epic is no doubt the earth-circling ocean, it was hardly this in the myth from which the words were taken."[18] And, what is still more important, we can understand better how, in the Gilgamesh epic (lines 115-116), the gods, after cowering like dogs, go up to the "heaven of Ana." They, too, fear the deluge, and only in the highest heaven can they feel themselves secure.

Such an explanation seems indispensable if the wide influence of the Babylonian form of the deluge-myth is to be accounted for. As Gunkel well remarks,[19] neither the tenacity and self-propagating character of this myth, nor the solemn utterance of Yahweh (who corresponds to the Babylonian Marduk) in Gen. viii. 21*b* (J.) and ix. 8-17 (P.) can be understood, if the deluge-story is nothing more than an exaggerated account of a historical, earthly occurrence. We, therefore, venture to hold that it is an insufficient account to give of the story in the Gilgamesh epic that it is a combination of a local tradition of the destruction of a single city with a myth of the destruction of mankind—a myth exaggerated in its present form, but based on accurate knowledge of the yearly recurring phenomenon of the overflow of the Euphrates.[20] There are no doubt points in the story as it now stands which indicate a composite origin, but it is probable that even the tradition which apparently limits the destruction to a single city, equally with many other local flood-stories, has a basis in what we may fairly call a celestial myth.

We can now return with some confidence to the Indian deluge-story. It is unlikely that so richly gifted a race as the Aryans of India should not have produced their own flood-story out of the same primeval germs which grew up into the earliest Babylonian flood-story,[21] and almost inconceivable that in its second form the Indian story should not have become adapted to what may be called the celestial mythic theory. The phrase "the northern mountain" for the place where the ship grounded may quite well be the name of an earthly substitute (the epic has "the highest summit of the Himalaya") for the mythic mountain of heaven. Nor is it unimportant that Manu is the son of the sun-god, and that the phrase "the seven rishis" in classical Sanskrit is a designation of the seven stars of the Great Bear. For such problems all that we can hope for is a probable solution. The opposite view[22] that the deluge is a historical occurrence implies a self-propagating power in early tradition which is not justified by critical research, and leaves out of sight many important facts revealed by comparative study.

Indian myth reconsidered.

For a conspectus of deluge-stories see Andree, *Die Flutsagen, ethnographisch betrachtet* (1891), by a competent anthropologist; E. Suess, *Face of the Earth*, i. 17 (1904); also Elwood Worcester, *Genesis in the Light of Modern Knowledge* (New York, 1901), Appendix ii., in tabular form, from Schwarz's *Sintfluth und Völkerwanderungen*. Dr Worcester's work is popular, but based on well-chosen authorities. The article "Flood" in Hastings' *D. B.* is comprehensive; it represents the difficult view that flood-stories, &c., are generally highly-coloured traditions of genuine facts.

(T. K. C.)

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1 See Muir, *Sanscrit Texts*, i. 182, 206 ff.

2 Cf. Carpenter and Harford-Battersby, *The Hexateuch*, ii. 9, where the documents are printed separately in a tabular form.

3 Isa. xi. 6-8 prophesies that one day this idyllic state shall be restored.

4 For a discussion of the Babylonian version of the Deluge Legend, recently discovered among the tablets from Nippur, see Nippur.

5 The genealogy in Gen. v. is hardly in its original form. Enoch is probably misplaced, and Noah inserted in error.

6 Cf. Cosmogony, and Cheyne's *Traditions and Beliefs of Ancient Israel* (on deluge-story).

7 Cf. the myths of the Pawnees and the Quichés of Guatemala.

8 See the cuneiform text described in *KAT*^{3}, pp. 498-499.

9 Zimmern, *KAT*^{3}, p. 554.

10 *i.e.* Atraḫasīs (Xisuthrus).

11 To have omitted the animals would have been an offence against primitive views of kinship.

12 Usener, *Die Sintflutsagen*, pp. 80-108, 115-127.

13 Ib. p. 254.

14 Stucken, *Astralmythen*, pp. 233-234.

15 *Amer. Journ. of Folklore*, xviii. 223 ff.

16 Schirren, *Wandersagen der Neuseeländer* (1856), p. 193.

17 Referring for Polynesia to Gerland in Waitz-Gerland, *Anthropologie der Naturvölker*, vi. 270-273 (1872). After a long interval, this theory has been taken up by Zimmern, *KAT*^{3}, p. 355, and by Jensen, *Das Gilgamesch-Epos* (1906), p. 120; Winckler (*AOF*, 3rd series, i. 96) also speaks of the deluge as a "celestial occurrence." For other forms of this view see Jeremias, *ATAO*, pp. 134-136; Usener, p. 239.

18 Cheyne, *Ency. Bib.* cols. 1063-1064.

19 *Genesis*, p. 67.

20 Jastrow, *Religion of Babylonia and Assyria* (1898), pp. 502, 506.

21 The view here adopted is that of Lindner and Usener. On the opposite side are Zimmern, Tiele, Jensen, Oldenberg, Nöldeke, Stucken, Lenormant.

22 Held by Franz Delitzsch, Dillmann and Lenormant.

DELYANNI, THEODOROS (1826-1905), Greek statesman, was born at Kalavryta, Peloponnesus, in 1826. He studied law at Athens, and in 1843 entered the ministry of the interior, of which department he became permanent secretary in 1859. In 1862, on the deposition of King Otho, he became minister for foreign affairs in the provisional government. In 1867 he was minister at Paris. On his return to Athens he became a member of successive cabinets in various capacities, and rapidly collected a party around him consisting of those who opposed his great rival, Tricoupi. In the so-called "Oecumenical Ministry" of 1877 he voted for war with Turkey, and on its fall he entered the cabinet of Koumoundoros as minister for foreign affairs. He was a representative of Greece at the Berlin Congress in 1878. From this time forward, and particularly after 1882, when Tricoupi again came into power at the head of a strong party, the duel between these two statesmen was the leading feature of Greek politics. (See GREECE: *History*.) Delyanni first formed a cabinet in 1885; but his warlike policy, the aim of which was, by threatening Turkey, to force the powers to make concessions in order to avoid the risk of a European war, ended in failure. For the powers, in order to stop his excessive armaments, eventually blockaded the Peiraeus and other ports, and this brought about his downfall. He returned to power in 1890, with a radical programme, but his failure to deal with the financial crisis produced a conflict between him and the king, and his disrespectful attitude resulted in his summary dismissal in 1892. Delyanni, by his demagogic behaviour, evidently expected the public to side with him; but at the elections he was badly beaten. In 1895, however, he again became prime minister, and was at the head of affairs during the Cretan crisis and the opening of the war with Turkey in 1897. The humiliating defeat which ensued—though Delyanni himself had been led into the disastrous war policy to some extent against his will—caused his fall in April 1897, the king again dismissing him from office when he declined to resign. Delyanni kept his own seat at the election of 1899, but his following dwindled to small dimensions. He quickly recovered his influence, however, and he was again president of the council and minister of the interior when, on the 13th of June 1905, he was murdered in revenge for the rigorous measures taken by him against gambling houses.

The main fault of Delyanni as a statesman was that he was unable to grasp the truth that the prosperity of a state depends on its adapting its ambitions to its means. Yet, in his vast projects, which the powers were never likely to endorse, and without their endorsement were vain, he represented the real wishes and aspirations of his countrymen, and his death was the occasion for an extraordinary demonstration of popular grief. He died in extreme poverty, and a pension was voted to the two nieces who lived with him.

DEMADES (*c.* 380-318 B.C.), Athenian orator and demagogue. He was originally of humble position, and was employed at one time as a common sailor, but he rose partly by his eloquence and partly by his unscrupulous character to a prominent position at Athens. He espoused the cause of Philip in the war against Olynthus, and was thus brought into bitter and life-long enmity with Demosthenes, whom he at first supported. He fought against the Macedonians in the battle of Chaeroneia, and was taken prisoner. Having made a favourable impression upon Philip, he was released together with his fellow-captives, and was instrumental in bringing about a treaty of peace between Macedonia and Athens. He continued to be a favourite of Alexander, and, prompted by a bribe, saved Demosthenes and the other obnoxious Athenian orators from his vengeance. It was also chiefly owing to him that Alexander, after the destruction of Thebes, treated Athens so leniently. His conduct in supporting the Macedonian cause, yet receiving any bribes that were offered by the opposite party, caused him to be heavily fined more than once; and he was finally deprived of his civil rights. He was reinstated (322) on the approach of Antipater, to whom he was sent as ambassador. Before setting out he persuaded the citizens to pass sentence of death upon Demosthenes and his followers, who had fled from Athens. The result of his embassy was the conclusion of a peace greatly to the disadvantage of the Athenians. In 318 (or earlier), having been detected in an intrigue with Perdiccas, Antipater's opponent, he was put to death by Antipater at Pella, when entrusted with another mission by the Athenians. Demades was avaricious and unscrupulous; but he was a highly gifted and practised orator.

A fragment of a speech (Περὶ δωδεκαετίας), bearing his name, in which he defends his conduct, is to be found in C. Müller's *Oratores Attici*, ii. 438, but its genuineness is exceedingly doubtful.

DEMAGOGUE (Gr. δημαγωγός, from ἄγειν, to lead, and δῆμος, the people), a leader of the popular as opposed to any other party. Being particularly used with an invidious sense of a mob leader or orator, one who for his own political ends panders to the passions and prejudices of the people, the word has come to mean an unprincipled agitator.

DEMANTOID, the name given by Nils Gustaf Nordenskiöld to a green garnet, found in the Urals and used as a gem stone. As it possesses high refractive and dispersive power, it presents when properly cut great brilliancy and "fire," and the name has reference to its diamond-like appearance. It is sometimes known as "Uralian emerald," a rather unfortunate name inasmuch as true emerald is found in the Urals, whilst it not infrequently passes in trade as olivine. Demantoid is regarded as a lime-iron garnet, coloured probably by a small proportion of chromium. The colour varies in different specimens from a vivid green to a dull yellowish-green, or even to a brown. The specific gravity of an emerald-green demantoid was found to be 3.849, and that of a greenish-yellow specimen 3.854 (A. H. Church). The hardness is only 6.5, or lower even than that of quartz—a character rather adverse to the use of demantoid as a gem. This mineral was originally discovered as pebbles in the gold-washings at Nizhne Tagilsk in the Ural Mountains, and was afterwards found in the stream called Bobrovka, in the Sysertsk district on the western slope of the Urals. It occurs not only as pebbles but in the form of granular nodules in a serpentine rock, and occasionally, though very rarely, shows traces of crystal faces.

(F. W. R.*)

DEMARATUS (Doric Δαμάρατος, Ionic Δημάρητος), king of Sparta of the Eurypontid line, successor of his father Ariston. He is known chiefly for his opposition to his colleague Cleomenes I. (*q.v.*) in his attempts to make Isagoras tyrant in Athens and afterwards to punish Aegina for medizing. He did his utmost to bring Cleomenes into disfavour at home. Thereupon Cleomenes urged Leotychides, a relative and personal enemy of Demaratus, to claim the throne on the ground that the latter was not really the son of Ariston but of Agetus, his mother's first husband. The Delphic oracle, under the influence of Cleomenes' bribes, pronounced in favour of Leotychides, who became king (491 B.C.). Soon afterwards Demaratus fled to Darius, who gave him the cities of Pergamum, Teuthrania and Halisarna, where his descendants were still ruling at the beginning of the 4th century (Xen. *Anabasis*, ii. 1. 3, vii. 8. 17; *Hellenica*, iii. 1. 6); to these Gambreum should perhaps be added (Athenaeus i. 29 f). He accompanied Xerxes on his expedition to Greece, but the stories told of the warning and advice which on several occasions he addressed to the king are scarcely historical.

See Herodotus v. 75, vi. 50-70, vii.; later writers either reproduce or embellish his narrative (Pausanias iii. 4, 3-5, 7, 7-8; Diodorus xi. 6; Polyaenus ii. 20; Seneca, *De beneficiis*, vi. 31, 4-12). The story that he took part in the attack on Argos which was repulsed by Telesilla, the poetess, and the Argive women, can hardly be true (Plutarch, *Mul. virt.* 4; Polyaenus, *Strat.* viii. 33; G. Busolt, *Griechische Geschichte*, ii.^{2} 563, note 4).

(M. N. T.)

DEMERARA, one of the three settlements of British Guiana, taking its name from the river Demerara. See Guiana.

DEMESNE (Demeine, Demain, Domain, &c.),[1] that portion of the lands of a manor not granted out in freehold tenancy, but (*a*) retained by the lord of the manor for his own use and occupation or (*b*) let out as tenemental land to his retainers or "villani." This demesne land, originally held at the will of the lord, in course of time came to acquire fixity of tenure, and developed into the modern copyhold (see Manor). It is from demesne as used in sense (*a*) that the modern restricted use of the word comes, *i.e.* land immediately surrounding the mansion or dwelling-house, the park or chase. *Demesne of the crown*, or royal demesne, was that part of the crown lands not granted out to feudal tenants, but which remained under the management of stewards appointed by the crown. These crown lands, since the accession of George III., have been appropriated by parliament, the sovereign receiving in return a fixed annual sum (see Civil List). *Ancient demesne* signified lands or manors vested in the king at the time of the Norman Conquest. There were special privileges surrounding tenancies of these lands, such as freedom from tolls and duties, exemption from danegeld and amercement, from sitting on juries, &c. Hence, the phrase "ancient demesne" came to be applied to the tenure by which the lands were held. Land held in ancient demesne is sometimes also called customary freehold. (See Copyhold.)

1 The form "demesne" is an Anglo-French spelling of the Old Fr. *demeine* or *demaine*, belonging to a lord, from Med. Lat. *dominicus*, *dominus*, lord; *dominicum* in Med. Lat. meant *proprietas* (see Du Cange). From the later Fr. *domaine*, which approaches more nearly the original Lat., comes the other Eng. form "domain," which is chiefly used in a non-legal sense of any tract of country or district under the rule of any specific sovereign state, &c. "Domain" is, however, the form kept in the legal phrase "Eminent Domain" (*q.v.*).

DEMETER, in Greek mythology, daughter of Cronus and Rhea and sister of Zeus, goddess of agriculture and civilized life. Her name has been explained as (1) "grain-mother," from δηαί, the Cretan form of ζειαί, "barley," or (2) "earth-mother," or rather "mother earth," δᾶ being regarded as the Doric form of λῆ. She is rarely mentioned in Homer, nor is she included amongst the Olympian gods.

The central fact of her cult was the story of her daughter Persephone (Proserpine), a favourite subject in classical poetry. According to the Homeric *Hymn to Demeter*, Persephone, while gathering flowers on the Nysian plain (probably here a purely mythical locality), was carried off by Hades (Pluto), the god of the lower world, with the connivance of Zeus (see also Proserpine). The incident has been assigned to various other localities—Crete, Eleusis, and Enna in Sicily, the last being most generally adopted. This rape is supposed to point to an original ἱερὸς λάμος, an annual holy marriage of a god and goddess of vegetation. Wandering over the earth in search of her daughter, Demeter learns from Helios the truth about her disappearance. In the form of an old woman named Deo (= the "seeker," or simply a diminutive form), she comes to the house of Celeus at Eleusis, where she is hospitably received. Having revealed herself to the Eleusinians, she departs, in her wrath having visited the earth with a great dearth. At last Zeus appeases her by allowing her daughter to spend two-thirds of the year with her in the upper world. Demeter then returns to Olympus, but before her final departure from earth, in token of her gratitude, she instructs the rulers of Eleusis in the art of agriculture and in the solemnities and rites whereby she desires in future to be honoured.

Those who were initiated into the mysteries of Eleusis found a deep meaning in the myth, which was held to teach the principle of a future life, founded on the return of Persephone to the upper world, or rather on the process of nature by which seed sown in the ground must first die and rot before it can yield new life (see Mystery). At Eleusis, Demeter was venerated as the introducer of all the blessings which agriculture brings in its train—fixed dwelling-places, civil order, marriage and a peaceful life; hence her name *Thesmophoros*, "the bringer of law and order," and the festival *Thesmophoria* (*q.v.*). J. G. Frazer takes the epithet to mean "bearer of the sacred objects deposited on the altar"; L. R. Farnell (*Cults of the Greek States*, iii. 106) suggests "the bringer of treasure or riches," as appropriate to the goddess of corn and of the lower world; others refer the name to "the law of wedlock" (θεσμὸς λέκτροιο, Odyssey, xxiii. 296, where, however, D. B. Monro translates "place, situation"). At Eleusis also, Triptolemus (*q.v.*), the son of Celeus, who was said to have invented the plough and to have been sent by Demeter round the world to diffuse the knowledge of agriculture, had a temple and threshing-floor.

In the agrarian legends of Iasion and Erysichthon, Demeter also plays an important part. Iasion (or Iasius), a beautiful youth, inspired her with love for him in a thrice-ploughed field in Crete, the fruit of their union being Plutus (wealth). According to Homer (*Odyssey*, v. 128) he was slain by Zeus with a thunderbolt. The story is compared by Frazer (*Golden Bough*, 2nd ed., ii. 217) with the west Prussian custom of the mock birth of a child on the harvest-field, the object being to ensure a plentiful crop for the coming year. It seems to point to the supersession of a primitive local Cretan divinity by Demeter, and the adoption of agriculture by the inhabitants, bringing wealth in its train in the form of the fruits of the earth, both vegetable and mineral. Some scholars, identifying Iasion with Jason (*q.v.*), regard Thessaly as the original home of the legend, and the union with Demeter as the ἱερὸς γάμος of mother earth with a health god. Erysichthon ("tearer up of the earth"), son of Triopas or Myrmidon, having cut down the trees in a grove sacred to the goddess, was punished by her with terrible hunger (Callimachus, *Hymn to Demeter*; Ovid, *Metam.* viii. 738-878). Perhaps Erysichthon may be explained as the personification of the labourer, who by the systematic cultivation and tilling of the soil endeavours to force the crops, instead of allowing them to mature unmolested as in the good old times. Tearing up the soil with the plough is regarded as an invasion of the domain of the earth-mother, punished by the all-devouring hunger for wealth, that increases with increasing produce. According to another view, Erysichthon is the destroyer of trees, who wastes away as the plant itself loses its vigour. It is possible that the story may originally have been connected with tree-worship. Here again, as in the case of Iasion, a conflict between an older and a younger cult seems to be alluded to (for the numerous interpretations see O. Crusius *s.v.* in Roscher's *Lexikon*).

It is as a corn-goddess that Demeter appears in Homer and Hesiod, and numerous epithets from various sources (see Bruchmann, *Epitheta Deorum*, supplement to Roscher's *Lexikon*, i. 2) attest her character as such. The name Ἰουλώ (? at Delos), from ἴουλος, "corn-sheaf," has been regarded as identifying the goddess with the sheaf, and as proving that the cult of Demeter originated in the worship of the corn-mother or corn-spirit, the last sheaf having a more or less divine character for the primitive husbandman. According to this view, the prototypes of Demeter and Persephone are the corn-mother and harvest maiden of northern Europe, the corn-fetishes of the field (Frazer, *Golden Bough*, 2nd ed., ii. 217, 222; but see Farnell, *Cults*, iii. 35). The influence of Demeter, however, was not limited to corn, but extended to vegetation generally and all the fruits of the earth, with the curious exception of the bean, the use of which was forbidden at Eleusis, and for the protection of which a special patron was invented. In this wider sense Demeter is akin to Ge, with whom she has several epithets in common, and is sometimes identified with Rhea-Cybele; thus Pindar speaks of Demeter χαλκοκρότος ("brass-rattling"), an epithet obviously more suitable to the Asiatic than to the Greek earth-goddess. Although the goddess of agriculture is naturally inclined to peace and averse from war, the memory of the time when her land was won and kept by the sword still lingers in the epithets χρυσάορος and ξιφηφόρος and in the name Triptolemus, which probably means "thrice fighter" rather than "thrice plougher."

Another important aspect of Demeter was that of a divinity of the under-world; as such she is χθονία at Sparta and especially at Hermione in Argolis, where she had a celebrated temple, said to have been founded by Clymenus (one of the names of Hades-Pluto) and his sister Chthonia, the children of Phoroneus, an Argive hero. Here there was said to be a descent into the lower world, and local tradition made it the scene of the rape of Persephone. At the festival Chthonia, a cow (representing, according to Mannhardt, the spirit of vegetation), which voluntarily presented itself, was sacrificed by three old women. Those joining in the procession wore garlands of hyacinth, which seems to attribute a chthonian character to the ceremony, although it may also have been connected with agriculture (see S. Wide, *De Sacris Troezeniorum, Hermionensium, Epidauriorum*, Upsala, 1888). The striking use of the term δημήτρειοι in the sense of "the

dead" may be noted in this connexion.

The remarkable epithets, Ἐρινύς and Μέλαινα, as applied to Demeter, were both localized in Arcadia, the first at Thelpusa (or rather Onkeion close by), the second at Phigalia (see W. Immerwahr, *Die Kulte und Mythen Arkadiens*, i. 1891). According to the Thelpusan story, Demeter, during her wanderings in search of Persephone, changed herself into a mare to avoid the persecution of Poseidon. The god, however, assumed the form of a stallion, and the fruit of the union was a daughter of mystic name and the horse Areion (or Erion). Demeter, at first enraged, afterwards calmed down, and washed herself in the river Ladon by way of purification. Demeter "the angry" (ἐρινύς) became Demeter "the bather" (λουσία). An almost identical story was current in the neighbourhood of Tilphossa, a Boeotian spring. In the Phigalian legend, no mention is made of the horse Areion, but only of the daughter, who is called Despoina (mistress), a title common to all divinities connected with the under-world. Demeter, clad in black (hence μέλαινα) in token of mourning for her daughter and wrath with Poseidon, retired into a cave. During that time the earth bore no fruit, and the inhabitants of the world were threatened with starvation. At last Pan, the old god of Arcadia, discovered her hiding-place, and informed Zeus, who sent the Moirae (Fates) to fetch her out. The cave, still called Mavrospēlya ("black cave"), was ever afterwards regarded as sacred to Demeter, and in it, according to information given to Pausanias, there had been set up an image of the goddess, a female form seated on a rock, but with a horse's head and mane, to which were attached snakes and other wild animals. It was clothed in a black garment reaching to the feet, and held in one hand a dolphin, in the other a dove. The image was destroyed by fire, replaced by the sculptor Onatas from inspiration in a dream, but disappeared again before the time of Pausanias.

Both μέλαινα and ἐρινύς, according to Farnell, are epithets of Demeter as an earth-goddess of the under-world. The first has been explained as referring to the gloom of her abode, or the blackness of the withered corn. The second, according to Max Müller and A. Kuhn, is the etymological equivalent of the Sanskrit Saranyu, who, having turned herself into a mare, is pursued by Vivasvat, and becomes the mother of the two Asvins, the Indian Dioscuri, the Indian and Greek myths being regarded as identical. According to Farnell, the meaning of the epithet is to be looked for in the original conception of Erinys, which was that of an earth-goddess akin to Ge, thus naturally associated with Demeter, rather than that of a wrathful avenging deity.

Various interpretations have been given of the horse-headed form of the Black Demeter: (1) that the horse was one of the forms of the corn-spirit in ancient Greece; (2) that it was an animal "devoted" to the chthonian goddess; (3) that it is totemistic; (4) that the form was adopted from Poseidon Hippios, who is frequently associated with the earth-goddess and is said to have received the name Hippios first at Thelpusa, in order that Demeter might figure as the mother of Areion (for a discussion of the whole subject see Farnell, *Cults*, iii. pp. 50-62). The union of Poseidon and Demeter is thus explained by Mannhardt. As the waves of the sea are fancifully compared to horses, so a field of corn, waving in the breeze, may be said to represent the wedding of the sea-god and the corn-goddess. In any case the association of Poseidon, representing the fertilizing element of moisture, with Demeter, who causes the plants and seeds to grow, is quite natural, and seems to have been widespread.

Demeter also appears as a goddess of health, of birth and of marriage; and a certain number of political and ethnic titles is assigned to her. Of the latter the most noteworthy are: Παναχαία at Aegium in Achaea, pointing to some connexion with the Achaean league; Ἀχαία,[1] "the Achaean goddess," unless it refers to the "sorrow" of the goddess for the loss of her daughter (cf. Ἀχέα in Boeotia); and, most important of all, Ἀμφικτυονίς, at Anthela near Thermopylae, as patron-goddess of the Amphictyonic league, subsequently so well known in connexion with the temple at Delphi.

The Eleusinia and Thesmophoria are discussed elsewhere, but brief mention may here be made of certain agrarian festivals held in honour of Demeter.

1. *Haloa*, obviously connected with ἅλως ("threshing-floor"), begun at Athens and finished at Eleusis, where there was a threshing-floor of Triptolemus, in the month Poseideon (December). This date, which is confirmed by historical and epigraphical evidence, seems inappropriate, and it is suggested (A. Mommsen, *Feste der Stadt Athen*, p. 365 foll.) that the festival, originally held in autumn, was subsequently placed later, so as to synchronize with the winter Dionysia. Dionysus, as the god of vines, and (in a special procession) Poseidon φυτάλμιος ("god of vegetation") were associated with Demeter. In addition to being a harvest festival, marked by the ordinary popular rejoicings, the Haloa had a religious character. The ἀπαρχαί ("first fruits") were conveyed to Eleusis, where sacrifice was offered by a priestess, men being prohibited from undertaking the duty. A τελετή ("initiatory ceremony") of women by a woman also took place at Eleusis, characterized by obscene jests and the use of phallic emblems. The sacramental meal on this occasion consisted of the produce of land and sea, certain things (pomegranates, honey, eggs) being forbidden for mystical reasons. Although the offerings at the festival were bloodless, the ceremony of the presentation of the ἀπαρχαί was probably accompanied by animal sacrifice (Farnell, Foucart); Mommsen, however, considers the offerings to have been pastry imitations. Certain games (πάτριος ἀγών), of which nothing is known, terminated the proceedings. In Roman imperial times the ephebi had to deliver a speech at the Haloa.

2. *Chloeia* or *Chloia*, the festival of the corn beginning to sprout, held at Eleusis in the early spring (Anthesterion) in honour of Demeter Chloë, "the green," the goddess of growing vegetation. This is to be distinguished from the later sacrifice of a ram to the same goddess on the 6th of the month Thargelion, probably intended as an act of propitiation. It has been identified with the *Procharisteria* (sometimes called *Proschaireteria*), another spring festival, but this is doubtful. The scholiast on Pindar (Ol. ix. 150) mentions an Athenian harvest festival *Eucharisteria*.

3. *Proërosia*, at which prayers were offered for an abundant harvest, before the land was ploughed for sowing. It was also called *Proarcturia*, an indication that it was held before the rising of Arcturus. According to the traditional account, when Greece was threatened with famine, the Delphic oracle ordered first-fruits to be brought to Athens from all parts of the country, which were to be offered by the Athenians to the goddess Deo on behalf of all the contributors. The most important part of the festival was the three sacred ploughings —the Athenian ὑπὸ πόλιν, the Eleusinian on the Rharian plain, the Scirian (a compromise between Athens and

Eleusis). The festival itself took place, probably some time in September, at Eleusis. In later times the ephebi also took part in the Proërosia.

4. *Thalysia*, a thanksgiving festival, held in autumn after the harvest in the island of Cos (see Theocritus vii.).

5. The name of Demeter is also associated with the *Scirophoria* (see Athena). It is considered probable that the festival was originally held in honour of Athena, but that the growing importance of the Eleusinia caused it to be attached to Demeter and Kore.

The attributes of Demeter are chiefly connected with her character as goddess of agriculture and vegetation—ears of corn, the poppy, the mystic basket (*calathus*) filled with flowers, corn and fruit of all kinds, the pomegranate being especially common. Of animals, the cow and the pig are her favourites, the latter owing to its productivity and the cathartic properties of its blood. The crane is associated with her as an indicator of the weather. As a chthonian divinity she is accompanied by a snake; the myrtle, asphodel and narcissus (which Persephone was gathering when carried off by Hades) also are sacred to her.

In Greek art, Demeter is made to resemble Hera, only more matronly and of milder expression; her form is broader and fuller. She is sometimes riding in a chariot drawn by horses or dragons, sometimes walking, sometimes seated upon a throne, alone or with her daughter. The Demeter of Cnidus in the British Museum, of the school of Praxiteles, apparently shows her mourning for the loss of her daughter. The article Greek Art, fig. 67 (pl. iv.), gives a probable representation of Demeter (or her priestess) from the stone of a vault in a Crimean grave.

The Romans identified Demeter with their own Ceres (*q.v.*).

See L. Preller, *Demeter und Persephone* (1837); P. R. Förster, *Der Raub und die Rückkehr der Persephone* (1874), in which considerable space is devoted to the representations of the myth in art; W. Mannhardt, *Mythologische Forschungen* (1884); J. E. Harrison, *Prolegomena to the Study of Greek Religion* (1903); L. Dyer, *The Gods in Greece* (1891); J. G. Frazer, *The Golden Bough* (2nd ed.), ii. 168-222; L. Preller, *Griechische Mythologie* (4th ed., by C. Robert); O. Kern in Pauly-Wissowa's *Realencyclopädie*, iv. pt. 2 (1901); L. Bloch in Roscher's *Lexikon der Mythologie*; O. Gruppe, *Griechische Mythologie und Religionsgeschichte*, ii. (1907); L. R. Farnell, *Cults of the Greek States*, iii. (1907); article "Ceres" by F. Lenormant in Daremberg and Saglio's *Dictionnaire des antiquités*.

(J. H. F.)

1 O. Gruppe (*Griechische Mythologie*, ii. 1177, note 1) considers it "certain" that Ἀχαία = Ἀχελωία, although he is unable to explain the form.

DEMETRIA, a Greek festival in honour of Demeter, held at seed-time, and lasting ten days. Nothing is known of it beyond the fact that the men who took part in it lashed one another with whips of bark (μόροττον), while the women made obscene jests. It is even doubtful whether it was a particular festival at all or only another name for the Eleusinia or Thesmophoria. The Dionysia also were called Demetria in honour of Demetrius Poliorcetes, upon whom divine honours were conferred by the Athenians.

Hesychius, *s.v.* μόροττον; Pollux i. 37; Diod. Sic. v. 4; Plutarch, *Demetrius*, 12; Daremberg and Saglio, *Dictionnaire des antiquités*.

DEMETRIUS, king of Bactria, was the son of the Graeco-Bactrian king Euthydemus, for whom he negotiated a peace with Antiochus the Great in 206 (Polyb. xi. 34). Soon afterwards he crossed the Hindu Kush and began the invasion of India (Strabo xi. 516); he conquered the Punjab and the valley of the Indus down to the sea and to Gujerat. The town Sangala, a town of the Kathaeans in the Punjab (Arrian v. 22, 2 ff.), he named after his father Euthydemia (Ptol. vii. 1, 46). That his power extended into Arachosia (Afghanistan) is proved by the name of a town Demetrias near Kandahar (Isidor. Charac. 19, cf. Strabo xi. 516). On his coins he wears an elephant's skin with trunk and teeth on his head; on bronze coins, which have also an Indian legend in Kharoshti letters (see Bactria), he calls himself the unvanquished king (Βασιλέως ἀνικήτου Δημητρίου). One of his coins has already the square form used in India instead of the circular. Eventually he was defeated by the usurper Eucratides (*q.v.*), who meanwhile had risen to great power in Bactria. About his death we know nothing; his young son Euthydemus II. (known only from coins) can have ruled only a short time.

(Ed. M.)

DEMETRIUS, the name of two kings of Macedonia.

1. Demetrius I. (337-283 B.C.), surnamed *Poliorcetes* ("Besieger"), son of Antigonus Cyclops and Stratonice. At the age of twenty-two he was left by his father to defend Syria against Ptolemy the son of Lagus; he was

totally defeated near Gaza (312), but soon partially repaired his loss by a victory in the neighbourhood of Myus. After an unsuccessful expedition against Babylon, and several campaigns against Ptolemy on the coasts of Cilicia and Cyprus, Demetrius sailed with a fleet of 250 ships to Athens. He freed the city from the power of Cassander and Ptolemy, expelled the garrison which had been stationed there under Demetrius of Phalerum, and besieged and took Munychia (307). After these victories he was worshipped by the Athenians as a tutelary deity under the title of *Soter* ("Preserver"). In the campaign of 306 against Ptolemy he defeated Menelaus (the brother of Ptolemy) in Cyprus, and completely destroyed the naval power of Egypt. In 305 he endeavoured to punish the Rhodians for having deserted his cause; and his ingenuity in devising new instruments of siege, in his unsuccessful attempt to reduce the capital, gained him the appellation of Poliorcetes. He returned a second time to Greece as liberator. But his licentiousness and extravagance made the Athenians regret the government of Cassander. He soon, however, roused the jealousy of the successors of Alexander; and Seleucus, Cassander and Lysimachus united to destroy Antigonus and his son. The hostile armies met at Ipsus in Phrygia (301). Antigonus was killed in the battle, and Demetrius, after sustaining a severe loss, retired to Ephesus. This reverse of fortune raised up many enemies against him; and the Athenians refused even to admit him into their city. But he soon afterwards ravaged the territory of Lysimachus, and effected a reconciliation with Seleucus, to whom he gave his daughter Stratonice in marriage. Athens was at this time oppressed by the tyranny of Lachares; but Demetrius, after a protracted blockade, gained possession of the city (294) and pardoned the inhabitants their former misconduct. In the same year he established himself on the throne of Macedonia by the murder of Alexander, the son of Cassander. But here he was continually threatened by Pyrrhus, who took advantage of his occasional absence to ravage the defenceless part of his kingdom (Plutarch, *Pyrrhus*, 7 ff.); and at length the combined forces of Pyrrhus, Ptolemy and Lysimachus, assisted by the disaffected among his own subjects, obliged him to leave Macedonia after he had sat on the throne for six years (294-288). He passed into Asia, and attacked some of the provinces of Lysimachus with varying success; but famine and pestilence destroyed the greater part of his army, and he solicited Seleucus for support and assistance. But before he reached Syria hostilities broke out; and after he had gained some advantages over his son-in-law, Demetrius was totally forsaken by his troops on the field of battle, and surrendered his person to Seleucus. His son Antigonus offered all his possessions, and even his person, in order to procure his father's liberty; but all proved unavailing, and Demetrius died in the fifty-fourth year of his age, after a confinement of three years (283). His remains were given to Antigonus, honoured with a splendid funeral at Corinth, and thence conveyed to Demetrias. His posterity remained in possession of the Macedonian throne till the time of Perseus, who was conquered by the Romans.

See *Life* by Plutarch; Diod. Sic. xix. xx.; Wilamowitz-Moellendorff, *Antigonos von Karystos*; De Sanctis, *Contributi alla storia Ateniese* in Beloch's *Studi di storia antica* (1893); Fergusson in Lehmann's *Beiträge z. alt. Gesch.* (*Klio*) vol. v. (1905); also authorities under Macedonian Empire.

2. Demetrius II., son of Antigonus Gonatas, reigned from 239 to 229 B.C. He had already during his father's lifetime distinguished himself by defeating Alexander of Epirus at Derdia and so saving Macedonia (about 260?). On his accession he had to face a coalition which the two great leagues, usually rivals, the Aetolian and Achaean, formed against the Macedonian power. He succeeded in dealing this coalition severe blows, wresting Boeotia from their alliance. The revolution in Epirus, which substituted a republican league for the monarchy, gravely weakened his position. Demetrius had also to defend Macedonia against the wild peoples of the north. A battle with the Dardanians turned out disastrously, and he died shortly afterwards, leaving Philip, his son by Chryseïs, still a child. Former wives of Demetrius were Stratonice, the daughter of the Seleucid king Antiochus I., Phthia the daughter of Alexander of Epirus, and Nicaea, the widow of his cousin Alexander. The chronology of these marriages is a matter of dispute.

See Thirlwall, *History of Greece*, vol. viii. (1847); Ad. Holm, *Griech. Gesch.* vol. iv. (1894); B. Niese, *Gesch. d. griech. u. maked. Staaten*, vol. ii. (1899); J. Beloch, *Griech. Gesch.* vol. iii. (1904).

(E. R. B.)

DEMETRIUS, the name of three kings of Syria.

Demetrius I. (d. 150 B.C.), surnamed *Soter*, was sent to Rome as a hostage during the reign of his father, Seleucus IV. Philopator, but after his father's death in 175 B.C. he escaped from confinement, and established himself on the Syrian throne (162 B.C.) after overthrowing and murdering King Antiochus V. Eupator. He acquired his surname of *Soter*, or *Saviour*, from the Babylonians, whom he delivered from the tyranny of the Median satrap, Timarchus, and is famous in Jewish history for his contests with the Maccabees. Hated for his vices, Demetrius fell in battle against the usurper, Alexander Balas, in 150 B.C.

Demetrius II. (d. 125 B.C.), surnamed *Nicator*, son of Demetrius I., fled to Crete after the death of his father, but about 147 B.C. he returned to Syria, and with the help of Ptolemy VII. Philometor, king of Egypt, regained his father's throne. In 140 B.C. he marched against Mithradates, king of Parthia, but was taken prisoner by treachery, and remained in captivity for ten years, regaining his throne about 129 B.C. on the death of his brother, Antiochus VII., who had usurped it. His cruelties and vices, however, caused him to be greatly detested, and during another civil war he was defeated in a battle at Damascus, and killed near Tyre, possibly at the instigation of his wife, a daughter of Ptolemy VII., who was indignant at his subsequent marriage with a daughter of the Parthian king, Mithradates. His successor was his son, Antiochus VIII. Grypus.

Demetrius III. (d. 88 B.C.), called *Euergetes* and *Philometor*, was the son of Antiochus VIII. Grypus. By the assistance of Ptolemy X. Lathyrus, king of Egypt, he recovered part of his Syrian dominions from Antiochus X. Eusebes, and held his court at Damascus. In attempting to dethrone his brother, Philip Epiphanes, he was defeated by the Arabs and Parthians, was taken prisoner, and kept in confinement in Parthia by King

Mithradates until his death in 88 B.C.

DEMETRIUS, a Greek sculptor of the early part of the 4th century B.C., who is said by ancient critics to have been notable for the life-like realism of his statues. His portrait of Pellichus, a Corinthian general, "with fat paunch and bald head, wearing a cloak which leaves him half exposed, with some of the hairs of his head flowing in the wind, and prominent veins," was admired by Lucian. He was contrasted with Cresilas (*q.v.*), an idealizing sculptor of the generation before. Since however the peculiarities mentioned by Lucian do not appear in Greek portraits before the 3rd century B.C., and since the Greek art of the 4th century consistently idealizes, there would seem to be a difficulty to explain. The date of Demetrius above given is confirmed by inscriptions found on the Athenian Acropolis.

(P. G.)

DEMETRIUS, a Cynic philosopher, born at Sunium, who lived partly at Corinth and later in Rome during the reigns of Caligula, Nero and Vespasian. He was an intimate friend of Thrasea Paetus and Seneca, and was held in the highest estimation for his consistent disregard of creature comfort in the pursuit of virtue. His contempt for worldly prosperity is shown by his reply to Caligula who, wishing to gain his friendship, sent him a large present. He replied, "If Caligula had intended to bribe me, he should have offered me his crown." Vespasian banished him, but Demetrius laughed at the punishment and mocked the emperor's anger. He reached the logical conclusion of Cynicism in attaching no real importance to scientific data.

DEMETRIUS DONSKOI[1] (1350-1389), grand duke of Vladimir and Moscow, son of the grand duke Ivan Ivanovich by his second consort Aleksandra, was placed on the grand-ducal throne of Vladimir by the Tatar khan in 1362, and married the princess Eudoxia of Nizhniy Novgorod in 1364. It was now that Moscow was first fortified by a strong wall, or *kreml* (citadel), and the grand duke began "to bring all the other princes under his will." Michael, prince of Tver, appealed however for help to Olgierd, grand duke of Lithuania, who appeared before Moscow with his army and compelled Demetrius to make restitution to the prince of Tver (1369). The war between Tver and Vladimir continued intermittently for some years, and both the Tatars and the Lithuanians took an active part in it. Demetrius was generally successful in what was really a contention for the supremacy. In 1371 he won over the khan by a personal visit to the Horde, and in 1372 he defeated the Lithuanians at Lyubutsk. Demetrius then formed a league of all the Russian princes against the Tatars and in 1380 encountered them on the plain of Kulikovo, between the rivers Nepryadvaya and Don, where he completely routed them, the grand khan Mamai perishing in his flight from the field. But now Toktamish, the deputy of Tamerlane, suddenly appeared in the Horde and organized a punitive expedition against Demetrius. Moscow was taken by treachery, and the Russian lands were again subdued by the Tatars (1381). Nevertheless, while compelled to submit to the Horde, Demetrius maintained his hegemony over Tver, Novgorod and the other recalcitrant Russian principalities, and even held his own against the Lithuanian grand dukes, so that by his last testament he was able to leave not only his ancestral possessions but his grand-dukedom also to his son Basil. Demetrius was one of the greatest of the north Russian grand dukes. He was not merely a cautious and tactful statesman, but also a valiant and capable captain, in striking contrast to most of the princes of his house.

See Sergyei Solovev, *History of Russia* (Rus.), vols, i.-ii. (St Petersburg, 1857), &c.; Nikolai Savelev, *Demetrius Ivanovich Donskoi* (Rus.), (Moscow, 1837).

(R. N. B.)

1 Of the Don.

DEMETRIUS PHALEREUS (*c.* 345-283 B.C.), Attic orator, statesman and philosopher, born at Phalerum, was a pupil of Theophrastus and an adherent of the Peripatetic school. He governed the city of Athens as representative of Cassander (*q.v.*) for ten years from 317. It is said that he so won the hearts of the people that 360 statues were erected in his honour; but opinions are divided as to the character of his rule. On the restoration of the old democracy by Demetrius Poliorcetes, he was condemned to death by the fickle Athenians and obliged to leave the city. He escaped to Egypt, where he was protected by Ptolemy Lagus, to whom he is said to have suggested the foundation of the Alexandrian library. Having incurred the displeasure of Lagus's successor Philadelphus, Demetrius was banished to Upper Egypt, where he died (according to some, voluntarily) from the bite of an asp. Demetrius composed a large number of works on poetry, history, politics, rhetoric and accounts of embassies, all of which are lost.

The treatise Περὶ Ἑρμηνείας (on rhetorical expression), which is often ascribed to him, is probably the work of a later Alexandrian (1st century A.D.) of the same name; it has been edited by L. Radermacher (1901) and W. Rhys Roberts (1902), the last-named providing English translation, introduction, notes, glossary and complete bibliography. Fragments in C. Müller, *Frag. Hist. Graec.* ii. p. 362. See A. Holm, *History of Greece* (Eng. trans.), iv. 60.

DEMETRIUS, PSEUDO- (or FALSE), the name by which three Muscovite princes and pretenders, who claimed to be Demetrius, son of Ivan the Terrible, are known in history. The real Demetrius had been murdered, while still a child, in 1591, at Uglich, his widowed mother's appanage.

1. In the reign of Tsar Boris Godunov (1598-1605), the first of these pretenders, whose origin is still obscure, emigrated to Lithuania and persuaded many of the magnates there of his tsarish birth, and consequently of his right to the Muscovite throne. His real name seems to have been Yury or Gregory, and he was the grandson of Bogdan Otrepev, a Galician boyar, and a tool in the hands of Tsar Boris Godunov's enemies. He first appears in history *circa* 1600, when his learning and assurance seem to have greatly impressed the Muscovite patriarch Job. Tsar Boris, however, ordered him to be seized and examined, whereupon he fled to Prince Constantine Ostrogsky at Ostrog, and subsequently entered the service of another Lithuanian, Prince Wisniwiecki, who accepted him for what he pretended to be and tried to enlist the sympathy of the Polish king, Sigismund III., in his favour. The king refused to support him officially, but his cause was taken up, as a speculation, by the Polish magnate Yury Mniszek, whose daughter Marina he afterwards wedded and crowned as his tsaritsa. The Jesuits also seem to have believed in the man, who was evidently an unconscious impostor brought up from his youth to believe that he was the real Demetrius; numerous fugitives from Moscow also acknowledged him, and finally he set out, at the head of an army of Polish and Lithuanian volunteers, Cossacks and Muscovite fugitives, to drive out the Godunovs, after being received into the Church of Rome. At the beginning of 1604 he was invited to Cracow, where Sigismund presented him to the papal nuncio Rangoni. His public conversion took place on the 17th of April. In October the false Demetrius crossed the Russian frontier, and shortly afterwards routed a large Muscovite army beneath the walls of Novgorod-Syeversk. The sudden death of Tsar Boris (April 13, 1605) removed the last barrier to the further progress of the pretender. The principal Russian army, under P. F. Basmanov, at once went over to him (May 7); on the 20th of June he made his triumphal entry into Moscow, and on the 21st of July he was crowned tsar by a new patriarch of his own choosing, the Greek Isidore. He at once proceeded to introduce a whole series of political and economical reforms. From all accounts, he must have been a man of original genius and extraordinary resource. He did his best to relieve the burdens of the peasantry; he formed the project of a grand alliance between the emperor, the pope, Venice, Poland and Muscovy against the Turk; he displayed an amazing toleration in religious matters which made people suspect that he was a crypto-Arian; and far from being, as was expected, the tool of Poland and the pope, he maintained from the first a dignified and independent attitude. But his extravagant opinion of his own authority (he lost no time in styling himself emperor), and his predilection for Western civilization, alarmed the ultra-conservative boyars (the people were always on his side), and a conspiracy was formed against him, headed by Basil Shuisky, whose life he had saved a few months previously. A favourable opportunity for the conspirators presented itself on the 8th of May 1606, when Demetrius was married to Marina Mniszek. Taking advantage of the hostility of the Muscovites towards the Polish regiments which had escorted Marina to Moscow and there committed some excesses, the boyars urged the citizens to rise against the Poles, while they themselves attacked and slew Demetrius in the Kreml on the night of the 17th of May.

See Sergyei Solovev, *History of Russia* (Rus.), vol. viii. (St Petersburg, 1857, &c.); Nikolai Kostomarov, *Historical Monographs* (Rus.) vols, iv.-vi. (St Petersburg, 1863, &c.); Orest Levitsky, *The First False Demetrius as the Propagandist of Catholicism in Russia* (Rus.) (St Petersburg, 1886); Paul Pierling, *Rome et Demetrius* (Paris, 1878); R. N. Bain, *Poland and Russia*, cap. 10 (Cambridge, 1907).

2. The second pretender, called "the thief of Tushino," first appeared on the scene *circa* 1607 at Starodub. He is supposed to have been either a priest's son or a converted Jew, and was highly educated, relatively to the times he lived in, knowing as he did the Russian and Polish languages and being somewhat of an expert in liturgical matters. He pretended at first to be the Muscovite boyarin Nagi; but confessed, under torture, that he was Demetrius Ivanovich, whereupon he was taken at his word and joined by thousands of Cossacks, Poles and Muscovites. He speedily captured Karachev, Bryansk and other towns; was reinforced by the Poles; and in the spring of 1608 advanced upon Moscow, routing the army of Tsar Basil Shuisky, at Bolkhov, on his way. Liberal promises of the wholesale confiscation of the estates of the boyars drew the common people to him, and he entrenched himself at the village of Tushino, twelve versts from the capital, which he converted into an armed camp, collecting therein 7000 Polish soldiers, 10,000 Cossacks and 10,000 of the rabble. In the course of the year he captured Marina Mniszek, who acknowledged him to be her husband (subsequently quieting her conscience by privately marrying this impostor, who in no way resembled her first husband), and brought him the support of the Lithuanian magnates Mniszek and Sapieha so that his forces soon exceeded 100,000 men. He raised to the rank of patriarch another illustrious captive, Philaret Romanov, and won over the towns of Yaroslavl, Kostroma, Vologda, Kashin and other places to his allegiance. But a series of subsequent disasters, and the arrival of King Sigismund III. at Sinolensk, induced him to fly his camp disguised as a peasant and go to Kostroma, where Marina joined him and he lived once more in regal state. He also made another but unsuccessful attack on Moscow, and, supported by the Don Cossacks, recovered a hold over all south-eastern Russia. He was killed, while half drunk, on the 11th of December 1610, by a Tatar whom he had flogged.

See Sergyei Solovev, *History of Russia* (Rus.) vol. viii. (St Petersburg, 1657, &c.).

3. The third, a still more enigmatical person than his predecessors, supposed to have been a deacon called

Siderka, appeared suddenly, “from, behind the river Yanza,” in the Ingrian town of Ivangorod (Narva), proclaiming himself the tsarevich Demetrius Ivanovich, on the 28th of March 1611. The Cossacks, ravaging the environs of Moscow, acknowledged him as tsar on the 2nd of March 1612, and under threat of vengeance in case of non-compliance, the gentry of Pskov also kissed the cross to “the thief of Pskov,” as he was usually nicknamed. On the 18th of May 1612 he fled from Pskov, was seized and delivered up to the authorities at Moscow, and there executed.

See Sergyei Solovev, *History of Russia* (Rus.), vol. viii. (St Petersburg, 1857, &c.).

(R. N. B.)

DEMIDOV, the name of a famous Russian family, founded by Nikita Demidov (b. *c.* 1665), who was originally a blacksmith serf. He made his fortune by his skill in the manufacture of weapons, and established an iron foundry for the government. Peter the Great, with whom he was a favourite, ennobled him in 1720. His son, Akinfiy Demidov (d. *c.* 1740), increased his inherited wealth by the discovery and working of gold, silver and copper mines. The latter’s nephew, Paul Grigoryevich Demidov (1738-1821), was a great traveller who was a benefactor of Russian scientific education; he founded an annual prize for Russian literature, awarded by the Academy of Sciences. Paul’s nephew, Nikolay Nikitich Demidov (1774-1828), raised and commanded a regiment to oppose Napoleon’s invasion, and carried on the accumulation of the family wealth from mining; he contributed liberally to the erection of four bridges in St Petersburg, and to the propagation of scientific culture in Moscow. Paul’s son, Anatoli Demidov (1812-1870), was a well-known traveller and patron of art; he married Princess Mathilde, daughter of Jerome Bonaparte.

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