

and the eastern churches believe that the consecration was the change of the elements into the body and the blood of Christ; the Protestant denominations think that, in general, the consecration was regarded in the ancient church, as it is by them now, as a setting apart for and devoting to sacred use. The formulas used at the distribution of the Lord's supper were early fixed in liturgies. All the old liturgies contain the words of institution and a prayer; that of the Greek church a prayer to the Holy Spirit to change bread and wine into the body and blood of Christ.—The place where the Lord's supper was celebrated was at first the dwellings of the believers. In times of persecution they often had to celebrate it in hidden places, at the tombs of the martyrs, &c. As ecclesiastical architecture was developed, special altar tables or altars were introduced for its celebration. The time of celebration was at first, in accordance with the name and the institution of the ordinance, the night or evening; but it soon became a practice to connect it with the morning service, and so it is still in most churches; the Moravians, however, celebrate it always at the evening service. Participation in it was generally very frequent in the first ages, but became gradually rarer. In the 5th century several ecclesiastical writers complained of the remissness of Christians in this respect. Later synods prescribed that all the faithful should receive it on the high festivals of the church (Epiphany, Easter, Pentecost, and Christmas). The 4th council of Lateran, in 1215, restricted this universal participation on the part of the members of the church to Easter alone. Yet all the writers of the church strongly recommended to the faithful frequency of communion. The same was urged by the reformers of the 16th century. The Roman Catholic church regards the omission of receiving the Lord's supper during the Easter season as a mortal sin. The Protestant churches in former centuries in some cases punished those who had not appeared at the communion table for a long time or who despised the eucharist with banishment, excommunication, and refusal of Christian burial. The free Protestant churches have generally in their constitutions and statutes some provisions for the proceedings to be observed toward church members who refrain from the celebration of the Lord's supper.—The ancient church excluded the catechumens and the *lapsi* from the Lord's supper, and often gave it to children. Infant communion lasted in the Latin church until the 12th century, and exists in the Greek church still. The deacons used to carry it to those who were prevented from being present at divine service. The apostles received it, according to eastern custom, reclining; in the 4th century the custom of standing, and later that of kneeling, was introduced. Kneeling is still the general or prevailing practice among Roman Catholics, the eastern churches, the Protestant Episcopal church, the Methodists, and the Lutherans; in the other churches, sitting prevails,

as being a more scriptural posture. In a few denominations it is customary to sit round a table, and in some regions 12 always sit down at a time. At first bread and the cup were given into the hands of the communicants; later the distributing clergyman placed the bread in their mouth, and held the cup to their lips. The self-communion of the laity is prohibited by all the Christian churches; the self-communion of clergymen is generally practised in the Roman Catholic and the eastern churches, and also customary in the Protestant Episcopal church and among the Moravians. In some churches various ceremonies, as burning of candles, &c., accompany the celebration; in most of the reformed churches nothing is changed in the usual form of the divine service, except that a special communion service is used. The Protestant churches generally have allowed a great liberty with regard to the mode of celebration, and there is accordingly a great variety of usages, which it would require too much space to describe.—Histories of the doctrine of the Lord's supper in the Christian church have been written by Schulz, *Die Christliche Lehre vom Abendmahle* (2d ed., Leipsic, 1831); Ebrard, *Das Dogma vom heiligen Abendmahle und seine Geschichte* (2 vols., Frankfurt, 1845-'6); Kahnis, *Die Lehre vom Abendmahl* (Leipsic, 1851); and Rückert, *Das Abendmahl; sein Wesen und seine Geschichte in der alten Kirche* (2 vols., Leipsic, 1856). An account of the mode of its celebration by the various denominations is given by Scheibel, *Kurze Nachricht von der Feier des heiligen Abendmahls bei den verschiedenen Religionsparteien* (Breslau, 1824).

LÖRETTO. See OASA SANTA.

LORI, a quadrumanous animal of the lemur family, and genus *stenops* (Illiger). The teeth are: incisors $\frac{1}{2}$, canines $\frac{1}{2}$, molars $\frac{2}{2}$; the ears are short and rounded; the eyes large and near together; the fore finger no longer than the thumb; the tail very short or absent. They form the family *nycticebidae* of some authors. They are nocturnal in their habits, and so slow in their movements that they are often called slow lemurs; they live on trees, eating fruit and insects, and sometimes small birds which they surprise at night. The sposo (*S. potto*, Ill.) is of a reddish color, and inhabits the Gold coast of Guinea; the spinous processes of the last 5 cervical and first 2 dorsal vertebrae, according to Van der Hoeven, pierce the hairy integument, and have only a weak horny covering. The slow lori (*S. tardigradus*, auct.) is of a yellowish gray color, with a dark dorsal band, and a narrow whitish stripe between the eyes; it rivals the sloth for slowness; it inhabits Bengal, Siam, Borneo, and Sumatra. The *S. javanicus* (Van der Hoeven) is found in Java. The slender lori (*S. gracilis*, Geoffr.), a native of Ceylon, is fawn-colored gray, without dorsal stripe. (See LEMUR.)

LORIENT, or L'ORIENT, a seaport town of France, in the department of Morbihan, situated on the bay of Biscay, at the mouth of the

river Scorff, which is here joined by the Blavet, 266 m. S. W. from Paris, and 40 m. N. W. from Vannes; pop. in 1856, 24,245. It is the seat of a dockyard with slips for laying down 80 vessels of war at a time. Connected with it are an arsenal, a school of naval artillery, artillery barracks, &c. The port is separated from the rest of the town by a wall, and occupies an area of 4,000 by 2,000 feet. There is a signal tower on an eminence S. of the harbor, from which vessels can be seen 80 m. out at sea. The entrances of vessels in 1854 were 860, tonnage 84,810; clearances, 1,488, tonnage 43,408. A number of vessels belonging to the port are engaged in the sardine fishery. The origin of Lorient is due to the naval depot founded there in 1666 by the French East India company, which from its situation took the name of *Port de l'Orient*, "port of the East." The building of the town was commenced in 1720, and in 1744 it was fortified. Its defences are still strong, and it ranks as a fortress of the 8d class.

LORME, MARION DE, or DELORME, a French courtesan, born in or near Ohâlons-sur-Marne about 1612, died in Paris in 1650. She was the daughter of a tradesman, and received little if any education. Endowed with extraordinary personal attractions, and with an intelligence and a wit equalled only by the recklessness and frivolity of her disposition, she captivated as soon as she came to Paris the hearts of many of the most brilliant gentlemen of the French court. Among her most devoted admirers was the celebrated marquis of Cinq-Mars, who was on the point of marrying her privately, in order to put an end to the attentions paid to her by Richelieu, when this occasion is said to have suggested to the amorous cardinal his law prohibiting secret marriages, the effect of which was to separate the lovers and to make the fickle Marion yield herself to the powerful minister. Her house soon became a centre for the most distinguished people. She shared her empire with Ninon de L'Enclos, who, however, was greatly her superior in mental culture, and who survived her half a century. Voltaire, in referring to Richelieu's relations with Ninon, is supposed to have confounded her with Marion. The number of her lovers was legion. Her favors were extended successively or simultaneously to the learned St. Evremont, the brilliant duke of Buckingham, and to many other more or less eminent men. During the minority of Louis XVI. she took an active interest in the movements of the Fronde. Her social circle, once the fashionable resort of the wits and roués of Paris, now became a focus of politicians and conspirators. In 1650 she was ordered by Mazarin to be arrested, but she died just before the officers of the minister came to take her to prison. Romantic reports of her having only simulated death, to make good her escape, and other stories in regard to her, were rife at the time, and have since been repeated, although they are not authenticated by facts.

LORRAINE, an ancient province of N. E.

France, was bounded N. by Luxemburg and Trier, N. E. by Deux-Ponts, E. by Alsace, S. by Franche Comté, and S. W. and W. by Champagne, thus comprising the territory now constituting the departments of Meuse, Moselle, Meurthe, and Vosges, a part of Bas-Rhin, and a district ceded to Rhenish Prussia by the treaty of Vienna of 1815. Its principal rivers were the Meuse, Moselle, Meurthe, Saône, and Ornain; the principal products were iron, salt, and other minerals, timber, grain, wine, and cattle. The inhabitants were mostly of German race, but only in a small part, between the Vosges and Metz, has the German language maintained itself; this part is therefore called German Lorraine. The province was divided into the duchy of Lorraine, comprising Lorraine proper, German Lorraine, and the territory of Vosges, with Nancy, Sarreguemines, and Épinal as capitals; the duchy of Bar, the capital of which was Bar-le-Duc; and the "three bishoprics," Metz, Toul, and Verdun.—Under the Roman emperor, the country formed a part of the province of Belgica Prima. It was conquered by Clovis, and on the division of the Frankish kingdom under his sons belonged to Austrasia. When the empire of Charlemagne had been repeatedly divided among his descendants, the division or kingdom of Lothaire II., son of the emperor Lothaire I., received the name of *Lothar's Ryk* in Low German, or *Lothari Regnum* in Latin, whence sprang the names Lotharingia in mediæval Latin, and Lorraine. His possessions, however, by far exceeded the limits of modern Lorraine, extending from the Moselle to the North sea. After his death in 868, Lorraine was divided between France and Germany, but subsequently the whole of it was attached to the latter empire. In the 10th century it was given by Otho the Great to his brother Bruno of Cologne, and was subsequently divided into Lower and Upper Lorraine. The former in later times received the name of Brabant, and eventually became a province of the dukes of Burgundy. The latter retained its name, and was conferred about the middle of the 11th century by the emperor Henry III. upon Gérard of Alsace, the founder of a long dynasty of dukes, who with some interruptions ruled Lorraine down to 1737, and some of whom greatly distinguished themselves in the wars of France and the empire. Collateral branches of the family were the Guises, Aumales, Elbeufs, Harcourts, and others distinguished in the history of France. During the reigns of Louis XII., XIV., and XV., Lorraine was a principal object of contention between the empire and its western rival. Finally, by the peace which terminated the war of Polish succession, the ex-king of Poland, Stanislas Leszczynski, father-in-law of Louis XV., received Lorraine and Bar, to be annexed after his death to France; the duke of Lorraine, Francis Stephen, the future husband of Maria Theresa of Hapsburg and emperor, receiving in exchange the rever-

sion of the grand duchy of Tuscany, in which as in Austria he became the founder of the house of Hapsburg-Lorraine. Leszczyński died in 1766, when Lorraine became fully annexed to France.

LORRAINE, CHARLES DE, brother of the 3d duke of Guise and cardinal of Guise, better known as the cardinal of Lorraine, born in Joinville, Feb. 17, 1524, died Dec. 26, 1574. At the age of 14 he received the archbishopric of Rheims, which his uncle Jean de Lorraine had resigned in his favor. In 1547 he officiated at the coronation of Henry II., and almost immediately afterward was made a cardinal. He was sent to Rome in 1555 to conclude an alliance with the pope against Charles V., and both in this and in various other diplomatic missions displayed a remarkable talent in the management of affairs of state. His conduct, however, was not always free from the suspicion of his sovereign; and having on one occasion seriously offended the king by assuming the title of cardinal of Anjou, and thereby reviving the claims of his family to the county of Provence, it needed all the influence of the Guises and the protection of the famous Diana of Poitiers to restore him to favor. In 1558 he had a secret interview at Peronne with the bishop of Arras (afterward Cardinal Granvelle), minister of Philip II., at which he was induced by well chosen flatteries to lend his influence for a peace between France and Spain and the mutual coöperation of the two monarchs against the Protestants. The peace was concluded soon afterward, but the cardinal had now quarrelled with Diana, and both in the negotiations for this treaty and in the subsequent favors of the French king saw himself supplanted by the constable de Montmorency. Under Francis II., whom he also crowned, he was restored to power and obtained the administration of the finances. In 1561 he placed the crown upon the head of Charles IX. He sat in the council of Trent the following year, and threatened, if the council were not declared above the pope, to present a protest signed by 120 bishops. He went to Madrid in 1569 to negotiate a marriage between Charles IX. and Elizabeth of Austria, and 2 years afterward performed the ceremony of coronation for the 4th time when the king's nuptials with that princess took place. The cardinal was a liberal patron of letters and the founder of the university of Rheims. He possessed great powers of oratory, of which he made frequent display; and his literary abilities are attested by numerous letters, speeches, and sermons, collections of which are preserved in the imperial library at Paris. Vain, ambitious, and presumptuous, he was judged with severity by his contemporaries, and was even accused, on very slight grounds, of having procured the death of Charles IX. by poison. He has also been charged with complicity in the massacre of St. Bartholomew's day; but though his policy toward the Protestants was undoubtedly a severe one, this statement is not proved, and it is by no means certain that he was in France at the time.

LORRAINE, CLAUDE. See CLAUDE LORRAINE.

LORTZING, ALBRECHT GUSTAV, a German composer, born in Berlin, Oct. 23, 1803, died there, Jan. 20, 1851. His father, who was connected with the theatre, introduced him upon the stage while a child, and in a few years he began to compose songs and marches. He soon after officiated in the twofold capacity of actor and singer, and while filling an engagement at Detmold in 1826 produced a melodrama entitled "The Pole and his Child," which met with considerable success. He now produced in rapid succession a number of similar works, and an oratorio, the "Ascension of Christ." In 1838 he accepted an engagement at Leipsic, where in 1837 he produced his *Ozar und Zimmermann* ("The Ozar and the Carpenter"), which became one of the most popular operas of the day. Among his other works are *Caramo*, *Hans Sachs*, *Der Wildschütz*, and *Undine*, all of which attained considerable popularity. He was subsequently connected with the theatre at Vienna and other cities, and at the time of his death held the position of director at the Friedrich-Wilhelmstadt theatre in Berlin. His music is light and pleasing.

LORY, a division of the parrot family, embracing several very showy birds of the East Indian and South Pacific archipelagos, characterized by a large but rather slender bill, curved to the pointed tip, and with the lateral margins nearly smooth; the weakness of the lower mandible and the absence of prominences on the palate, and their softer tongue, often furnished with a pencil of bristles, show that their natural food is soft pulpy fruits and the juices of plants and flowers, and not the hard nuts and seeds eaten by most other parrots. The tail is generally of moderate length, rounded or graduated; the legs stout, and the wings long and pointed; the prevailing color is a brilliant scarlet. In the typical genus *lorius* (Brisson), embracing about half a dozen species found in Borneo, the Moluccas, and New Guinea, the wings are moderate, with the 2d and 3d quills longest; feathers of the tail broad and rounded. One of the handsomest is the purple-capped lory (*L. domicella*, Briss.), about a foot long; the color is rich scarlet, with a yellow color on the breast, purplish crown, greenish wings with a bluish violet flexure, bluish green thighs, and orange yellow bill; it is highly esteemed for its beauty, activity, docility, and powers of articulation. The black-capped lory (*L. tricolor*, Steph.), about the size of a pigeon, is scarlet and violet, with black crown, green wings, and tail varied with red, green, and violet; it pronounces very distinctly the word "lory," which has given the name to the subfamily. The crimson lory (*L. cardinalis*, Bodd), 12 inches long, has the edge of the shoulders violet, the tail long, and the bill reddish. The blue-tailed and scarlet lory (*L. coruleatus*, Bechst., and *L. garrulus*, Linn.) are sufficiently characterized by their names. The Papuan

lory has a very long wedge-shaped tail, especially the median two feathers, and is put by Wagler in his genus *charmosyna*; this, the *C. Papuensis* (Wagl.), is a very elegant bird, the ground color of the plumage being brilliant scarlet; the top of the head, nape, lower back, rump, and tibiae deep azure; sides of breast and thighs rich yellow; wings green, as also the basal half of the tail; the tips of the tail feathers saffron yellow. In the genus *eos* (Wagl.) the lateral margins of the bill are sinuated, the wings long, with the first 3 quills nearly equal and longest, tail lengthened and wedge-shaped, with the feathers narrowed at the end. In this genus would come the Indian lory (*E. Indica*, Wagl.), in which the scarlet color is variegated with violet, the crown, abdomen, and tail blue, and the quills yellowish brown. The Borneo lory (*E. rubra*, Wagl.) has a purplish tinge on the back and tail, the quill and tail feathers tipped with green, the scapulars blue, and the breast sometimes yellowish. The scaly lory (*E. squamata*, Bodd.) has the scarlet undulated with blackish, giving it a scaled appearance. The genus *coriphilus* (Wagl.) has a slender bill with sinuated margins, long wings, and tail lengthened and graduated. The species inhabit the islands of the south Pacific, living principally on the fruit of the banana, and making their nest in the highest cocoa palms. The *C. Kuhlii* (Wagl.) is one of the handsomest of the family, but wild and timorous in its disposition, with a weak and hissing voice; the prevailing color is blood red, with the vent and upper tail coverts sulphur yellow; hind neck, back, and wings yellowish green; forehead and crown green, with a double occipital crest of violet purple.—In the genus *electus* (Wagl.) the bill is large and strong, much higher than broad, with the lateral margins dentated; the wings long and pointed, and tail moderate and nearly equal. The largest and most elegant species is the *E. grandis* (Wagl.); the bill is black, the head and upper neck crimson; lower parts lilac purple; back purplish scarlet; bend of wings and outer web of quills blue, and vent yellow. These gaudy birds inhabit the Moluccas and New Guinea.

LOS ANGELES, a S. co. of California, on the Pacific, drained by the San Gabriel, Los Angeles, and Santa Anna rivers; area, about 4,000 sq. m.; pop. in 1852, 8,829; in 1856, about 15,800. The surface is generally mountainous, with broad and fertile valleys. Recent explorations have developed the existence of gold, silver, copper, and other valuable minerals. It promises to be one of the most extensive and productive grape-growing districts in the world. The number of grape vines in 1856 was 726,000, and in 1858, 1,650,000; the vintage of 1857 yielded 850,000 galls. of wine, and 5,000 galls. of brandy; that of 1858 was estimated at 500,000 galls. of wine. One company cultivates a vineyard of 1,200 acres. There are 7 grist mills, 2 saw mills, a foundry, distillery, and tannery. There are hot springs, recommended

for medicinal properties, at the mission of San Juan.—LOS ANGELES, the capital, is situated on the Los Angeles river, 30 m. from its mouth, and 850 m. S. S. E. from San Francisco; pop. in 1850, 1,610. It was founded in 1781, and called Puebla de los Angeles, "city of the angels," from the excellence of its situation and climate.

LOS HERREROS. See BRETON DE LOS HERREROS.

LOSSING, BENSON JOHN, an American author and engraver, born in Beekman, Dutchess co., N. Y., Feb. 12, 1813. He was educated at a district school, and in 1826 was apprenticed to a watchmaker in Poughkeepsie. He subsequently entered into partnership with his employer, but in the autumn of 1835 relinquished the business, and became joint owner and editor of the "Poughkeepsie Telegraph," a leading country newspaper. He also commenced the publication of a semi-monthly journal of a literary character, called the "Poughkeepsie Casket," with a view of illustrating which he studied engraving under J. A. Adams of New York, and drawing in the school of the American academy of design in the same city. He soon after settled permanently in New York as an engraver on wood, and at the same time edited and illustrated the "Family Magazine." His connection with his newspaper enterprises in Poughkeepsie, however, continued until 1841, his editorial duties being performed at night and early in the morning. In 1841 appeared his first publication, "An Outline History of the Fine Arts" (18mo.), forming No. 103 of Harper's "Family Library," followed in 1847 by an illustrated work entitled "Seventeen Hundred and Seventy-Six" (8vo.), and in 1848 by "Lives of the Signers of the Declaration of Independence" (12mo.). In the latter and subsequent year he edited "The Young People's Mirror." In 1848 he projected the plan of his "Pictorial Field Book of the Revolution," which was issued in numbers in 1850-'52, forming 2 8vo. volumes, with more than 1,000 illustrations by himself. In the preparation of this work, which is remarkable for the minute and accurate information which it conveys, the author travelled at different times upward of 9,000 miles, visiting every important battle field of the revolution, and making sketches on the spot. Among his remaining works are an "Illustrated History of the United States for Schools and Families" (12mo., 1854; enlarged ed. 1856); "Our Countrymen, or Brief Memoirs of Eminent Americans" (12mo., 1855; enlarged ed. 1857); "Primary History of the United States" (12mo., 1857); "Mount Vernon and its Associations," illustrated by himself (4to., 1859); "Life and Times of Philip Schuyler" (2 vols. 12mo., 1860); and "Life of Washington" (3 vols. 8vo., 1860). He is now (1860) engaged upon elaborate illustrated works on the war of 1812, and the French empire in America. He has been a frequent contributor to the periodical literature of the day, and has furnished for "Harper's Magazine" a series of illustrated articles on American biography. He is now contributing

a series of articles to the London "Art Journal" entitled "The Hudson from the Wilderness to the Sea," illustrated from his own drawings.

LOT, primarily, that which falls to any one as his portion or destiny; more usually, a die or any thing else employed to represent a person's allotment in the determination of fortunes and events by chance. This method of divination, in some form, and for different purposes, has been almost universally known. Among the ancient Hebrews, the land of Canaan was divided by lot, as were the cities which were distributed among the priests and Levites. The casting of lots is also mentioned in connection with other important private and public transactions, but its mode cannot be fully determined. The Greeks and Romans were accustomed to divine auguries from lots, by having each of them marked with a prophetic verse or other inscription. They also opened the works of the poets, as Homer, Euripides, or Virgil, at hazard, and regarded the passage on which their eye first fell as an oracle. The use of the Bible in this latter method was not uncommon during the middle ages.

LOT, a river of France, which rises in the department of Lozère on the W. of the Cévennes, flows through the departments of Aveyron and Lot, and joins the Garonne at Aiguillon, in Lot-et-Garonne, after a course of about 280 m., of which about 180 m., commencing at Entraigues, are navigable. Its chief affluents are the Coulagues, Truyère, and Salle on the right, and the Dourdon and Diège on the left.

LOT, a S. W. department of France, in the old province of Gascony, drained by the rivers Lot and Dordogne, bounded N. by Corrèze, E. by Cantal and Aveyron, S. by Tarn-et-Garonne, and W. by Lot-et-Garonne and Dordogne; area, 2,020 sq. m.; pop. in 1856, 298,738. The surface is mainly an extensive plateau of limestone, traversed in all directions by ridges of hills, and toward the E. abutting on the mountains of Cantal. The soil is fertile, and the chief productions are wheat, maize, barley, oats, and fruit, especially prunes, the drying and preparation of which form an important branch of industry. The culture of the white mulberry and the rearing of silkworms are extensively prosecuted. Minerals and manufactures are of little importance. Capital, Cahors.

LOT, son of Haran, and nephew of Abraham, lived about 2000 B. C. His history is related in Gen. xi.-xix. With his grandfather Terah and his uncle Abraham he went from Ur of the Chaldees to Haran, and thence with the latter to Canaan. Here quarrels arose between the shepherds of Abraham and those of Lot, because they had not room enough together for their increasing flocks. Abraham proposed a separation, and generously left to his nephew the choice of the region. Lot chose for himself the well watered region of the Jordan, and his flocks pastured as far S. as Sodom. Thus he was involved in the fate of the kings of that region, when they strove to make themselves indepen-

dent of Chedorlaomer, the king of Elam; he was made a prisoner with them, but rescued and brought back by Abraham. He now fixed his abode at Sodom, and seems to have occupied a high social or official position there. He alone with his wife and two daughters escaped from the destruction of Sodom, but his wife was soon after turned into "a pillar of salt" for looking back with regret upon the guilty city. Lot went first with his two daughters to Zoar, and thence fled to the neighboring mountains and dwelt with them in a cave. His daughters, apprehensive lest their race might die out with them, made their father drunk with wine, and became, by him, the mothers of Ammon and Moab, the progenitors of the Ammonites and Moabites. Of the further history of Lot nothing has been recorded.

LOT-ET-GARONNE, a S. W. department of France, in Gascony, taking its name from its two principal rivers, bounded N. by Dordogne, E. by Lot and Tarn-et-Garonne, S. by Gers, and W. by Landes and Gironde; area, 2,050 sq. m.; pop. in 1856, 840,041. The surface is an elevated and undulating plain, furrowed with valleys, each occupied by a stream. The soil is generally fertile, but there are sterile sandy districts, or *landes*, and marshes. Wheat, maize, rye, tobacco, hemp, and fruit are the principal productions. The cork tree is extensively grown, and supplies material for the most important employment, cork cutting. Capital, Agen.

LOTHAIRE I., emperor of the West, born in 796, died in Prüm, Sept. 29, 855. When in 817 his father Louis le Débonnaire shared the empire with his 3 sons, Lothaire, Pepin, and Louis, the first received the largest portion, and the right of suzerainty over his brothers. In 822 he was crowned king of Italy by the bishop of Milan, and afterward received the imperial crown from Pope Pascal. After the birth of Charles the Bald, and the bestowment upon him of a domain at the expense of his elder brothers, Lothaire excited Pepin and Louis to revolt, and twice dethroned his father, in 880 and 883. He became emperor on the death of his father, but was involved in disputes with his brothers Louis and Charles, and was defeated by them in the battle of Fontenay, June 25, 841. By the treaty of Verdun in 843, he received Italy, Burgundy, and a district in the east of France, which was afterward called Lotharingia or Lorraine. During the wars of Lothaire the Normans plundered the coasts of the North sea, the Saracens devastated his Italian provinces, and the clergy and barons greatly extended their power. After dividing his states among his 3 sons, the emperor became a monk in the convent of Prüm, in the Ardennes highlands, and died 6 days after being received.

LOTTERY (Ital. *lotteria*), a game in which the lot, *lotto*, decides), a sort of gaming contract, by which, for a valuable consideration, one may by favor of the lot obtain a prize of a value superior to the amount or value of that which he risks. In its best and most frequent

application, the word describes those schemes of this nature which are conducted under the supervision and guaranty of government, and the proceeds of which are devoted to public objects. Almost all modern states have, at some period of their history, employed lotteries as a means of revenue. But though they supply a ready mode of replenishing the public treasury, they have always been found to exert a mischievous influence upon the people. The poor are invited by them rather than the rich. They are diverted from persistent labor and patient thrift, by the hope of sudden and splendid gains; and as it is the professed principle of these schemes to withhold a large part of their receipts, a necessary loss falls upon a class which of all in the community can least afford to bear it. Between the years 1816 and 1828 the French government derived from lotteries an annual income of 14,000,000 francs. A few years ago the government suppressed them, and in January of the next year 525,000 francs more were found to be in the savings banks of Paris alone than in the same month of the preceding year. In other European states government lotteries are still maintained. They have become an almost indispensable source of revenue; and they are defended by the argument that as the passion for play is irrepressible among the people, and their money would otherwise be invested in foreign or in secret and less fairly managed schemes, the state may well assume the conduct of lotteries at home; that under its supervision the evils attendant upon them are diminished, and their earnings are devoted to the public welfare. Similar to the lottery of modern times was the mode sometimes adopted among the Romans in distributing the *congiaria* among the people; instead of the usual direct donations of corn, wine, and oil, tickets were issued which entitled the holders to various shares in these supplies. A closer resemblance is found in the favorite custom of Augustus, which was imitated by his successors, of distributing at his feasts sealed packets (*sortes conviviales*), similar in appearance, but containing orders for articles of very different value. The same practice existed among the feudal princes. In the middle ages the same mode was adopted by the Italian merchants in the disposition of their wares. A money lottery, called the *lotto*, was instituted at Florence in 1530 for the benefit of the state; and in Venice a half century later lotteries existed under public control.—Two kinds of lottery may be distinguished, the Genoese or numerical, and the Dutch or class lottery. The former originated in Genoa. The election by lot of 5 members of the grand council afforded the subject of wager. The names of 90 candidates were thrown into a wheel of fortune, and bets were made upon the result of the drawing. Numbers were afterward substituted for the names of the councillors, and the city undertook the direction of the game. The players fixed upon certain numbers, wagering that one, two, or more of them would be drawn among the 5,

or that they would appear in a certain order. The lottery maintained itself by calculating nicely, according to the doctrine of probabilities, the chances of success, and then adjusting the prizes so as to insure a profit to the bank. The prizes were larger as the chances of success were less; thus in the class of chances which required 2 out of the 5 numbers drawn, one ticket in 400 may win. In Austria, where this sort of lottery is used, the holder is paid with 240 times, and in Bavaria with 270 times the price of his ticket. In the *quaterna*, which requires 4 of the 5 numbers, the probabilities of success are as 1 to 511,088; and the winner receives in Austria 60,000 times, and in Bavaria 64,500 times the value ventured. Out of Italy this sort of lottery was first established in Vienna in 1752, and in Berlin in 1763. It has been observed that it is most employed in Catholic countries. The origin of the second kind, the class lottery, has been referred to the Roman *congiaria*, already mentioned; but with more correctness probably to the lotteries of merchandise established at several places in Europe during the middle ages, and the invention of Italian merchants. In this species, the number and value of the prizes are regularly estimated, all the ticket holders are interested at once in the play, and chance determines whether a prize or a blank shall fall to a given number. The drawing generally takes place at several different times, and the largest prize is withheld till the drawing of the last class. The lottery is supported by a fixed percentage deducted from each prize.—The first lottery in France was established in 1539. Francis I. gave his assent to it, on condition of a surrender to the crown of a tax on every lot. It received the name of *blanque* from the white tickets which indicated the blanks. A law promulgated in the 6th year of the republic (1798) prohibited all private or foreign lotteries, and from that date the *loteries nationales* displaced all others. They were instituted in all the large cities. In 1800, 3 or 4 drawings took place within the state every week. This government monopoly lasted until 1836. A law of May 21 of that year abolished all lotteries, and included among them all sales of merchandise or other property, movable or immovable, effected by lot, and all associations whatever offered to the public in which the lot is the principle of decision. An infraction of these prohibitions is punished by imprisonment of from 2 to 6 months and by fine of from 100 to 1,000 francs. In case of a second conviction for the offence, the punishment may rise to double the maximum. The offender may also be deprived for 5 or 10 years of the exercise of some of his civil rights. The law confiscates the property offered in the lottery, and enforces severe penalties against its agents and managers, whether the scheme be French or foreign. Lotteries of personal property, the proceeds of which are to be devoted to charitable objects or to the encouragement of art, may be authorized by government.—In Germany the

first class lottery was opened at Nuremberg in 1699. This kind seems to be the one most used in that country at the present time. The lotteries are controlled by government, and their profits applied to the support of workhouses and similar institutions, or to charitable objects. The principle of the system is to return in prizes the money received, deducting a small profit and the cost of management, which discount amounts usually to about 18 per cent. Money lotteries are most frequent, though lotteries of goods are often offered. The latter are very attractive, because each ticket holder receives some piece, though it be of slight value; they require like all others the approval of government. Whole estates, which have become heavily encumbered, have been sometimes offered as prizes. The premium lotteries of Germany are peculiar to that country. Governments issue proposals for loans, offering to capitalists a small percentage upon the amount furnished, by way of interest, and perhaps a like amount in premiums to be awarded by lot. The hope of winning the prizes secures bidders for the loans at a low return of interest, who would not have supplied the funds at the usual rate.—The earliest English lottery of which there is any record was instituted in 1569. The drawing took place at the west door of St. Paul's cathedral; 40,000 shares were sold at 10s. each. The prizes consisted of plate, and the profits were devoted to the repair of the harbors of the kingdom. During the following century the passion for this sort of gambling rapidly increased. In Queen Anne's time lotteries were denounced as "public nuisances." In 1612, by permission of James I., a lottery was drawn for the profit of the Virginia company, and produced about £80,000. The first parliamentary lottery was established in 1709. From this time onward, during the period in which the English state lotteries were carried on under act of parliament, the usual plan was to distribute in prizes of different magnitudes an amount equal to £10 for each ticket; the profit consisted in the advance upon this value paid by contractors, who sold directly to the people, and often by dividing tickets into parts. The prizes were generally funded in annuities. Thus in 1747, when £1,000,000 was raised by the sale of 10,000 shares, the prizes were paid in perpetual annuities at 4 per cent. In 1778 the number of lottery offices in the whole kingdom was 400. In that year an act was passed obliging every person who kept such an office to take out a yearly license and to pay £50 for it; this measure soon reduced the number from 400 to 41. But the evils which in every country have been found attendant on lottery speculations attracted in 1819 the attention of the English people, and the subject was thoroughly discussed in parliament. The mischievous influences of the system were admitted, but for the time at least all other arguments yielded to that of its necessity as a source of revenue. But in 1823 public sentiment had become so far adverse to the further approval of these institu-

tions, that a lottery was only tolerated in that year because it was to be the last. The act which sanctioned it was accompanied by provisions for the future suppression of lotteries, and for rendering illegal the sale within the kingdom of any tickets or shares of tickets in foreign projects of this character.—In the United States, the lottery has been from the earliest settlement of the country a familiar means of raising funds, which in this country could have been secured in no other mode so easily if at all. The Virginia company, as has already been mentioned, derived a large profit from English lotteries, and the influence of them extended gradually to the eastern colonies; for it is reported that an assembly of ministers at Boston in 1699 denounced the lottery as "a cheat," and its agents as "pillagers of the people." Generally, however, lotteries enjoyed a fair reputation, and certainly were soon extensively employed throughout the country, for many important and beneficial purposes. Colleges have been founded, roads made, bridges built, ferries improved, and hospitals erected by the aid of lotteries. In 1838 a society was formed in Pennsylvania which advocated their suppression. In July, 1834, the society issued an address to the public, setting forth its objects and views. It is to the efforts of this society that we should mainly attribute the action of most of the states in prohibiting the further establishment of lotteries. Where they are not especially authorized (and in some states the constitution expressly forbids the legislature to authorize them), the parties concerned in them are, in nearly all the states, subject to the imposition of heavy penalties. There exist in the state reports many cases where the provisions of state statutes concerning lotteries have been construed by the courts, but these decisions are necessarily of a particular character, and no important general principles can be derived from them. In Tennessee and Virginia, the acts abolishing lotteries have been by express decisions pronounced constitutional. In Massachusetts, a clause in such an act authorizing a search for tickets provided for the purpose of drawing a lottery is not held to be inconsistent with that article of the bill of rights which declares that every subject has a right to be secure from all unreasonable searches and seizures of his house or person. In New York and Pennsylvania lotteries are declared to be public nuisances, and they may therefore be indicted as such. The schemes known as art unions are held to be lotteries by express decisions. In the language of the court in New York: "These associations distribute a small number of prizes among a great number of persons. The prizes and blanks are drawn in the same manner as in other lotteries. The intention of these schemes is to sell works of art for more than they can be sold for at private sale, and this is to be brought about by an appeal to the universal passion for playing at games of chance. They have all the attributes and elements of lotteries."

LOTUS, the name given to a rich fruit known to the ancients, but concerning which much dispute now exists. Several distinct species of plants bear the name, and no fewer than 11 to which the word is applied are enumerated by Fée (*Flore de Virgile*, Paris, 1822). The weight of testimony seems to rest upon the *sisyphus lotus* of Linnæus, which is found indigenous in Tunis and in other parts of Africa. This seems to agree best with the account of Polybius, who describes it as a thorny shrub, which grew in that region of Africa known as Syrtica, with berries of the size of an olive, which were first white and afterward tinged with red, and which had a taste like dates. According to Shaw ("Travels in Barbary and Levant," London, 1757), the *lotus arbor* of the ancients appears to be the same plant with the *seedra* of the Arabs, a shrub very common in Jereeda and other parts of Barbary. It has the leaves, prickles, flowers, and fruit of the *sisyphus* or *jujab*, only with this difference, that the fruit here is round, smaller, and more luscious, and the branches are neither so jointed nor crooked. The fruit is still in much repute, tastes something like gingerbread, and is sold in the markets all over the southern districts of that region. The Arabs call it *aneb enta el seedra*, or the *jujab* of the *seedra*; and Olaf Celsius had so high an opinion of it, that he described it as the *dudaim* (mandrake) of the Scriptures. A species of *sisyphus*, which grows into a large tree, with yellow, farinaceous berries of a delicious taste, was met with by Mungo Park in the interior of Africa; the berries being exposed to the sun and then pounded, the meal was made into cakes for food. There are several species of *sisyphus* which are eaten in India. One kind, whose fruit is of the size of a plum and its taste mild and sweet, is much esteemed. Another species (*Z. jujuba*, De Lamarck) is described in Hooker's "Journal of Botany" as a shrub which bears the fruit known in the island of Mauritius by the name of *masson*. Its height is there from 25 to 30 feet; its bark is grayish, thick, and cracks in age, having deep crevices on the trunk; its branches are spreading and drooping, and the young branches as well as the under side of the leaves are covered with a cottony, whitish, and sometimes rust-colored down; the shape of the leaves is oval, rounded in some varieties, elongated in others, finely toothed along their edges, blunt, of a glossy green above and marked with 8 longitudinal main nerves; spines growing in pairs, one large, straight, and sharp-pointed, the other smaller, stronger, and hooked; flowers axillary, greenish, arranged in small tufts; calyx 5-toothed, petals 5, unguiculate; stamens with the filaments curved inward; a fleshy disk that surmounts the ovary is tipped with two styles. The flowers appear in January; the fruit, ripening in June and July, and continuing till the beginning of September, consists of fleshy drupes of an ovoid or roundish form, enveloping a bony nut of two monospermous cells, one of which

is frequently abortive. In shape, size, and color, the fruit resembles a ripe Canada plum. This species grows readily in the most arid soil. The *sisyphus* belongs to the natural order of *rhamnaceæ*, typically represented in the buckthorn (*rhamnus catharticus*), and with other co-species bearing fruit which is violently purgative, though highly spoken of in the treatment of dropsy. The berries of *Z. orthocanthus* are employed by the natives of Gambia in making a sort of wine; but the fruit of *Z. Baclei* is regarded as poisonous. The bark of several species is medicinal.—Munby (*Flore de l'Algérie*, &c., Paris, 1847) considers *nitraria tridentata* as the true lotus tree of the ancients, a shrub found in the deserts of Lowssin near Tunis, producing a succulent fruit of stimulating qualities. The lotus of the Egyptians is the *nelumbium speciosum*, a fine aquatic plant, sacred to Osiris and Isis, and regarded in Egyptian delineations as signifying the creation of the world. The blue water lily of the Nile (*nymphaea cerulea*) occurs also in the decorations upon the ancient Egyptian remains; and both these beautiful flowers appear also to be favorite subjects for modern Chinese art.—The word *lotus* is affixed to a genus of modern botany, comprising plants of the natural order of *fabaceæ*, with pretty, papilionaceous flowers, and natives of widely separate regions of the globe. The claw-podded lotus (*L. ornithopodoides*) belongs to Sicily—a small procumbent species, with yellow flowers and very odd-looking legumes clustered into a figure like the foot and claws of a bird. The *L. Jacobæus* of the flower seed catalogues, a native of the Cape Verd islands, is a graceful, upright little plant, with numerous, downy, narrow leaves, and very conspicuous dark purplish black flowers. It succeeds well in the greenhouse, flowering nearly all the year round. The pods of *L. edulis* are eaten by the poorer inhabitants of Candia and Barbary, and the young and tender pods of *L. gebelia* (an Arabic name) are eaten by the Arabs. The greater (*L. major*) and the common lotus of Great Britain (*L. corniculatus*) are both recommended to be sown with white clover in laying down lands to permanent pasture. Sinclair in his "British Grasses" speaks of them as well suited for meadows where the soil is moist. According to Burnett, the leaves of the latter species become blue in drying, and would probably afford a dye like indigo, which article is produced from plants closely allied. Two or three species of lotus reach to the size of shrubs having ligneous stems; they are however natives of warm climates, and not hardy.—Homer (Od. ix. 84 *et seq.*) describes the *Loto-phagi* or lotus-eaters as a people on the N. coast of Africa, who were visited by Ulysses in his wanderings, and who endeavored to detain his companions by giving them the lotus to eat. Whoever ate of this fruit wished never again to depart nor to see again his native country. This poetical idea is known also to the Arabs, who call it the "fruit of destiny," which is to be eaten in paradise, and has been exquisitely

wrought out by Tennyson in his poem "The Lotus-Eaters." The lotus is a symbolical and favorite flower in Buddhist ceremonies of worship.

LOUDON, a N. E. co. of Va., separated from Md. by the Potomac; area, 460 sq. m.; pop. in 1850, 22,079, of whom 5,641 were slaves. The surface is hilly, having the Blue Ridge on the N. W. border. The Kittoctan mountain is in the middle of the county. The soil varies, but a large portion is fertile. The productions in 1850 were 563,930 bushels of wheat, 749,428 of Indian corn, and 60,228 lbs. of wool. There were 33 churches, and 1,708 pupils attending public schools. Capital, Leesburg.

LOUDON, or LAUDON, GIDEON ERNST, baron, a field marshal in the Austrian service, born in Trotzen, Livonia, Oct. 10, 1716, died in Neutitzscheim, Moravia, July 14, 1790. He was descended from an ancient Scottish family settled for several centuries in Livonia, and at 15 years of age entered the Russian military service, from which he retired after the peace of Belgrade in 1739, with the rank of lieutenant. He subsequently applied with several of his companions in arms to enter the service of Frederic the Great of Prussia; and after much trouble procured an interview with the king, who turned from him with aversion, exclaiming to his courtiers: "The physiognomy of this man does not please me." Repairing to Vienna, he received in 1742 a captain's commission in Trenc's corps of pandours, and fought with reputation in the campaigns of Bavaria and the Rhine in 1742-'4. At an affair of outposts near Saverne he was wounded and taken prisoner, but was exchanged and participated in the second Silesian war against Prussia. Disgusted with the cruelties of his commander, he left the corps, and after the peace of Dresden remained for several years in obscurity and poverty. Having at length procured a major's commission in a regiment stationed on the Turkish frontier, he married, embraced the Catholic religion, and devoted much time to the study of mathematics and tactics. At the breaking out of the 7 years' war he was appointed lieutenant-colonel of a partisan corps charged with supporting the movements of the Austrian army, and in a single year, by his activity, courage, and capacity, acquired the rank of general, notwithstanding that the battles in which he participated were generally disastrous to the Austrians. His commission of general having fallen into the hands of Frederic, the latter sent it to him with a congratulatory letter. In 1758 he contributed powerfully to raise the siege of Olmütz, and harassed the retreat of Frederic, receiving for his services the rank of lieutenant field marshal. In the succeeding year he crossed the Brandenburg frontier to cover the operations of Marshal Daun, and ended a series of brilliant exploits by routing the Prussians at the decisive battle of Kunersdorf, Aug. 12, 1759, in which Frederic lost 200 cannon and 20,000 men.

Placed in command of an army of 80,000 men with the rank of *Feldzeugmeister*, he gained the battle of Landshut, June 29, 1760, took the fortress of Glatz, and covered the retreat of Daun after the Austrian defeat at Liegnitz with so much skill that Frederic exclaimed: "We must learn from Loudon how to retreat; he leaves the field like a conqueror." He crowned his achievements in the 7 years' war by taking by assault, without previous investment, the important city of Schweidnitz, filled with provisions and munitions of war. During the peace which succeeded he was employed with credit in various public capacities, and in 1766 became a member of the aulic council of war, and in 1769 commandant general of Moravia. For a number of years Loudon lived in retirement at his estate near Vienna, devoting himself with enthusiasm to his favorite studies; but upon the breaking out of the Bavarian war of succession he took the field in Bohemia, and by a skilful concentration of his forces on the Isar prevented a junction between Prince Henry of Prussia and Frederic, thereby securing a decided advantage to the Austrians. His military career terminated with the campaign against the Turks in 1788-'9, the first act of which he brought to a successful conclusion by the capture of Belgrade. He died soon after removing to his head-quarters in Moravia, whither the emperor Leopold had sent him after the Turkish war. He was a man of true piety and modesty, simple in his manners and tastes, wholly averse to securing influence by flattering the weaknesses of the great, and was beloved by his troops.

LOUDON, JOHN CLAUDIUS, a Scottish horticulturist and author, born at Cambuslang, Lanarkshire, April 8, 1783, died in London, Dec. 14, 1843. He was educated at Edinburgh, and in 1803 went to London, where he engaged in landscape gardening, and published several essays on that and kindred subjects. In 1806, with his father, he rented a farm in Middlesex, and subsequently a still larger one in Oxfordshire, where he gave instruction to agricultural pupils. In 1812 he retired with a competency, and made a journey of professional observation in Germany and Russia. In 1814, finding that the greater portion of his property had been lost through injudicious investments, he once more applied himself to landscape gardening, and determined to undertake the compilation of a large work on horticulture. In order to perfect his knowledge of continental gardening, he visited France and Italy in 1819. In 1822 his "Encyclopædia of Gardening" made its appearance, and met with an extraordinary sale. In 1825 his "Encyclopædia of Agriculture" was published; in 1829, his "Encyclopædia of Plants" (of which, however, little more than the plan was his own); and in 1838 his *Arboretum et Fruticetum Britannicum*, or "An Account of all the Trees and Shrubs, whether Wild or Cultivated, of Great Britain." This work, the most laborious and expensive of all his literary un-

dertakings, proved a source of great pecuniary embarrassment to its author, involving him in difficulties which preyed on his health and accelerated his death. He produced various other works, among them an "Encyclopædia of Cottage, Farm, and Villa Architecture," which has become a handbook with all rural and suburban builders in England. In 1826 Mr. Loudon established the "Gardener's Magazine," which he continued till his death; in 1828, the "Magazine of Natural History;" in 1834, the "Architectural Magazine," suspended in 1838; and in 1836, the "Suburban Gardener." All these he edited simultaneously with the progress of his *Arboretum*, notwithstanding that he had for years suffered under great bodily infirmities, and had lost by disease his right arm and the use of all but two fingers of his left hand, being thus obliged to employ an amanuensis.—JANE, an English authoress, wife of the preceding, born near Birmingham in 1808, died in London, July 18, 1858. Her father, Mr. Thomas Webb of Ritwell hall, having met with reverses of fortune in building speculations, she turned her attention to literature, and published in 1827 a novel entitled "The Mummy," containing a quasi-prophetic description of the steam plough, which, attracting the attention of Mr. Loudon, led to an acquaintance which in 1830 resulted in their marriage. Mrs. Loudon contributed to many of her husband's works, and after his death prepared new editions of some of the most important of them. She received a pension of £100 from the civil list for services rendered to science by her husband and by herself. Among the works which she wrote or compiled herself are: "Gardening for Ladies" (London, 1840; new ed. 1849); "Ladies' Companion to the Flower Garden" (1841; 5th ed. 1847); "British Wild Flowers" (1846); and "Botany for Ladies" (1849).

LOUGH, JOHN GRAHAM, an English sculptor, born in Greenhead, Northumberland, in the early part of the present century. He is the son of a small farmer, and evinced his taste for art in childhood by teaching himself drawing and modelling. Being advised to establish himself in London, he received much encouragement from Haydon, and in 1827 sent to the exhibition a colossal statue of Milo, which was greatly admired for its thoroughly Greek spirit, and which was subsequently executed in marble for the duke of Wellington. In 1834 he visited Italy, and went through a course of self-instruction for 4 years, executing in the mean time commissions for the dukes of Northumberland and Sutherland, and other wealthy patrons. Upon returning to England he produced "A Boy giving Water to a Dolphin," "A Roman Fruit Girl," "Bacchanalian Revel," "Hebe Banished," and a well known group called "The Mourners." He subsequently gave more attention to portrait busts and monumental statues, chief among which are the statues of the queen and Prince Albert, the marquis of Hastings, and Robert Southey, and an admir-

able posthumous bust of the late Prof. Edward Forbes. Among his later ideal creations are the "Fighting Horses," the "Jealousy of Oberon," "Ariel," "Puck," "Titania," and the colossal marble group of "Satan Subdued by the Archangel Michael," considered his finest achievement.

LOUIS I., LE DÉBONNAIRE, or THE PIOUS, king of the Franks and emperor of the West, born in Casseneuil, Aquitania, in 778, died in Ingelheim, near Mentz, June 20, 840. He was the son of Charlemagne, received when 3 years old the title of king of Aquitania, and in 818 was associated in the imperial dignity with his father, whom he succeeded in the following year. On his accession he permitted the Saxons, whom Charlemagne had transported into Gaul, to return to their own country. Animated by justice and full of good intentions, he tried at first to reform his own family, the court, the clergy, and the provincial administration; but his vacillating disposition unfitted him for the task, and finally brought misery upon him and disorder upon the empire. In 817, yielding to the request of his sons, he shared with them the government of his vast dominions, giving Aquitania to Pepin, Bavaria to Louis, and Italy to Lothaire. His nephew Bernard, being thus deprived of the latter kingdom, which he had inherited from his father, revolted against him, was defeated, taken prisoner, had his eyes put out, and died in consequence. The emperor, under the impulse of remorse and the reproaches of the bishops, subjected himself to a public penance in a national assembly at Attigny in 822. Having had a fourth son by his second wife, Judith of Bavaria, he formed for him, at the diet of Worms in 829, a new kingdom out of the countries he had already distributed among the 3 eldest; these, being dissatisfied with this arrangement, revolted against their father, whom his partiality to his wife and her reputed paramour Bernhard, duke of Septimania, had made unpopular. They seized his person, and had him deposed, while Judith was confined to a convent. Bernhard escaped. The people of Germany stood by the emperor, and in 830 restored him to his throne in a general assembly at Nimeguen. Another revolt broke out in 833, Pope Gregory IV. siding with the insurgents. Louis marched against them, but was betrayed by his own army at Rothfield, and delivered up to Lothaire, who, without the consent of his brothers, subjected the unhappy old man to indignities, had him brought before a council at Compiègne, over which his personal enemy, Ebbo, archbishop of Rheims, presided, charged him with a number of crimes which he was obliged to confess aloud, and finally caused him to be degraded. Louis and Pepin, moved partly by pity, partly by jealousy of their brother, then took their father's part, and restored to him the crown in the states-general held at Thionville in 834. Louis at once forgave Lothaire, who came to make submission. His partiality for his youngest son Charles, to whom he wished

to bequeath more than his full share of territory, again involved him in trouble. In the diet of Worms (839), Pepin being dead, the emperor proposed to divide his whole empire between Lothaire and Charles, upon which Louis, aided by his nephew Pepin II., took arms again. Louis marched against them, but before reaching the rebels he was seized with an illness which proved fatal. With the reign of Louis le Débonnaire commenced the dissolution of the Carolingian empire.

LOUIS VI., THE FAT, the 5th Capetian king of France, born in 1078, died Aug. 1, 1137. The son of Philip I. by his first wife, Bertha of Holland, he was pursued by the hatred of his stepmother, Bertrade of Montfort, and obliged for a while to seek refuge in England. In 1100 he was associated in the government with his father, whom he succeeded in 1108. Full of spirit and ambition, he aimed at placing the royal authority upon a solid basis, and waged incessant war against the troublesome vassals of the crown, including his own brother Philip, count of Mantes. The lords of Mont-l'Héry and Cuncy, and the counts of Montfort and Montmorency, also felt the weight of his arms. He tried to secure the duchy of Normandy to William Cliton, son of Robert Courteheuse, but failed in the attempt, being defeated at Brenneville in 1119 by Henry I. of England, who had seized upon that duchy. This check would have proved fatal to the power of Louis, had not the clergy armed their parishioners and led them to his support. Peace was finally restored by the council held at Rheims under the presidency of Pope Calixtus II. A few years later, on the death of Charles the Good, Louis invested his favorite William Cliton with the county of Flanders. He had some hand in the communal revolution that distinguished the 11th century, but was guided in this by his interest rather than by any preconceived system, and does not deserve the name of "father of communes" which is sometimes applied to him.

LOUIS IX., king of France, and a saint of the Roman Catholic church, born in Poissy, April 25, 1215, died near Tunis, Africa, Aug. 25, 1270. He was the son of Louis VIII. and his queen Blanche of Castile. His mother was one of the most illustrious characters of the age, distinguished alike for virtue, intellect, and energy; and on the death of her husband in 1226, when her son was 11 years old, she assumed the regency of the kingdom, and, in spite of the most formidable opposition on the part of the great nobles, governed France with vigor and prudence, and educated her son in the strictest principles of Christian piety. Louis, at the age of 19, was married for political reasons to Marguerite, daughter of Raymond Bérenger, count of Provence, a girl of 12 years; but the queen mother kept the young couple separate till the king was 25. In 1241 the count de la Marche, a powerful vassal of the crown, broke into rebellion, and was assisted by Henry III. of England, who landed with a

considerable force at the mouth of the Gironde. Louis marched against the rebels and their English allies, and defeated them at Saintes, which put an end to the war. He treated the vanquished rebels with such clemency and magnanimity that he won their hearts, and had no trouble with his vassals during the rest of his reign. He removed one great cause of the disturbances which had hitherto afflicted the kingdom, by enacting that no noble of France should thereafter hold a divided allegiance, many of the nobles until then holding fiefs of both the French and English kings, and adhering to each in turn as suited their views or interests. The measures of Louis in this instance strengthened the patriotism and national feeling of the French, and removed a frequent occasion of war. A severe check was also put upon the prevalent practice of private war among the nobles by an ordinance called *quarantaine le roi*, which forbade the private redress of injuries for 40 days after they had been committed, and directed that during that interval justice should be administered only by the royal authorities. In 1244 news reached Europe of the conquest of Jerusalem by the Kharizmians, of the treacherous massacre of the Christian inhabitants, and of the defeat and slaughter of the knights templars and hospitallers, after a gallant struggle near Gaza. These tidings greatly excited Christendom; the 7th crusade was proclaimed at the council of Lyons in 1245; and in 1246, during an illness of which he nearly died, Louis assumed the cross. After extensive preparations, he appointed his mother regent, and embarked in Aug. 1248 from Aigues-Mortes, a port which he had founded on the Mediterranean, for Cyprus, the appointed place of rendezvous for his forces, composed of both French and English. Thence in June, 1249, he sailed to invade Egypt, at that time the most powerful of the Mohammedan states, whose conquest was considered a necessary preliminary to that of the Holy Land. His fleet of 1,800 vessels carried 8,000 knights, and a great army of common soldiers. He landed near Damietta, and, the Egyptian sultan being at the point of death and the kingdom in confusion, no serious opposition was made at the outset; and Damietta, which was then populous and strongly fortified, surrendered without resistance. The Nile was low at this season, and had the French marched at once upon Cairo, before the Egyptians had recovered from their panic and the river had begun to rise, there is no reason to doubt that the expedition would have been successful. But Louis lingered for 5 months at Damietta, waiting the arrival of a part of his fleet which had been forced by a tempest to take refuge in a Syrian port. The favorable moment for advance was lost, and when in November the army began to move toward Cairo, its march was impeded by the inundation, the Egyptians rallied in great force, and after a hard-won victory at Mansoura, in

which the king's brother and many other knights were slain, Louis was compelled to retreat toward Damietta, where he had left a strong garrison. His army suffered terribly from pestilence and want of supplies; and being continually harassed by the Egyptians, the king and his forces, about 80,000 in number, surrendered at discretion, April 5, 1250. The prisoners were treated barbarously, but Louis amid all his misfortunes behaved with dignity and resignation. The Egyptians demanded a ransom of 500,000 livres. Louis replied that he would pay that sum for the liberation of his soldiers, but that a king of France could not be valued for money. He offered Damietta in exchange for himself, and he and the remnant of his followers were liberated on the surrender of that city and the payment of 400,000 livres. He set sail for Acre in Syria, where he remained nearly 4 years, negotiating with the Mohammedans and vainly waiting for reinforcements from France. A large amount of treasure sent to him by Blanche was lost at sea. The queen mother herself died in 1252. The king at length, in the spring of 1254, sailed from Palestine with about 500 followers, and reached France after a stormy voyage of 10 weeks. After his return he occupied himself actively in the reform of his kingdom, and displayed high qualities as a legislator. He enacted many just and important laws, and greatly mitigated the harshness of the criminal jurisprudence of France. So scrupulous was his conscience even in affairs of state, that by a treaty concluded with Henry III. of England in 1259 he restored to that monarch, against the urgent remonstrances of his ministers and councillors, the conquests made by Philip Augustus from the English, to which Louis thought he had not inherited a just title. In 1261 he refused the crown of Naples and Sicily, which was offered to him by Pope Urban IV., though when the same offer was subsequently made to his brother Charles of Anjou, he suffered that prince to accept it, and furnished him with men and money for the conquest of Naples in 1265. Three years later he began to prepare for a new crusade, and on July 1, 1270, embarked with 60,000 men for Tunis. On landing he formed a camp amid the ruins of Carthage, where he waited in expectation of forming an alliance with the sultan of Tunis, who, it had been rumored, was disposed to embrace Christianity. A pestilence soon broke out among the French, and Louis, whose health had long been feeble, was seized with the disease and died after a fortnight's illness, having before seen one of his sons expire. His other son and successor, Philip III., who was also at the point of death, recovered and saved the remains of the army. "No name in modern history," says the most recent English historian of France, Eyre Evans Crowe, "has been the object of more profound reverence and more enthusiastic praise than that of St. Louis. Royalists regarded him,

and with justice, as the true founder of the monarchy, and liberals still laud him for having undermined feudalism, and shorn the aristocracy of those privileges which rendered them princes in the land."

LOUIS XI., king of France, the 6th of the house of Valois, and son of Charles VII. by Marie of Anjou, born in Bourges, July 8, 1423, died in Plessis-les-Tours, Aug. 21, 1488. He gave early evidence of a passionate temper and a cruel disposition. In 1436 he married Margaret of Scotland. In 1440 he took part in the aristocratic rebellion known as *La Praguerie*, although he was far from being partial to the nobility. The plans of the insurgents were foiled, and Louis, becoming reconciled to his father, received the province of Dauphiné as his appanage. He participated in several military expeditions, and in 1444 was sent by his father at the head of the "great companies" or *escorecheurs* to aid the emperor Frederic against the Swiss, whom he defeated near Basel, but to whom nevertheless, through policy, he granted favorable terms of peace. On the death of his wife (1445), his hostility to his father's mistress, the celebrated Agnes Sorel, caused great trouble at court; he is said to have elapped her in the face, and was afterward charged with poisoning her. In 1446 the disagreement between him and the king caused Louis to retire to Dauphiné, which he governed as an independent principality, evincing uncommon administrative talents. In 1451 he married, notwithstanding his father's opposition, Charlotte, daughter of the duke of Savoy. The quarrel between the king and his son, embittered by interested courtiers, came to such a pitch that Charles VII. marched against the dauphin at the head of a strong army. The latter escaped to Burgundy, where he was welcomed by his uncle Philip the Good, who treated him with the utmost generosity. From his cousin Charles, count of Charolais, afterward Charles the Bold, he received equal kindness. Although repeatedly summoned to return to France, Louis refused to obey; he mistrusted the courtiers, while Charles VII. himself was convinced that his son was continually plotting against his life. This fear hastened his death, and Louis was called to the throne of France, July 22, 1461. Thenceforth he bent all his energies to the destruction of the aristocracy whom he had once supported against his father, and ultimately to that of the very princes of Burgundy by whom he had been protected. In his eagerness to obtain the object of his ambition, his rashness was more than once nearly fatal to him. As early as 1465, a coalition of princes, among whom were his former friend the count of Charolais, the dukes of Brittany and Bourbon, and the celebrated Dunois, was formed against him, with his own brother, the duke of Berry, at their head. Louis fought a drawn battle with them at Mont-l'Héry; but fearing the consequences of a protracted contest, he offered them advantageous terms, giving Normandy to his brother, the cities along the Somme to Bur-

gundy, and offices and pensions to others. The following year he caused this treaty to be annulled by the states-general at Tours, and succeeded in rescuing his provinces from the grasp of his antagonists. But in 1467 a new league was formed, headed by Charles the Bold, who had become duke of Burgundy. In the hope of conciliating Charles, the king paid him a visit at Péronne, while his own emissaries were inciting the citizens of Liège to rebellion against the duke. He thus placed himself in the power of this fierce prince, who, enraged at the news he received from Flanders, kept the king in confinement for 8 days, and consented to spare his life only on the most disadvantageous terms. Louis released the duke from all allegiance, gave the county of Champagne to his brother, and was obliged to assist Charles in taking and punishing the very city which he had encouraged to revolt. His only consolation in this circumstance was the vengeance he took upon Cardinal Balue, who had betrayed him; he caused the traitor to be confined for about 11 years in an iron cage. The subsequent policy of Louis was more successful. The treaty of Péronne was of course declared null and void by the states-general at Tours in 1470, upon which a new revolt broke out; but this was frustrated chiefly by the death of the king's brother, which occurred so opportunely in 1472 that Louis was, not without good reason, suspected of having got rid of him by poisoning. Charles the Bold, presenting himself as the avenger of the young prince, invaded the northern provinces of France; but the heroism of the inhabitants of Beauvais stopped his career, and he raised the siege of this town and turned his arms against Lorraine, Alsace, and Switzerland. Here Louis XI. had prepared for him a formidable enemy. Charles was defeated at Granson and at Morat by the Swiss; and when he attempted to revenge himself upon Nancy and the young duke of Lorraine, he was again opposed by the hardy mountaineers, and lost his life in a battle which also witnessed the complete discomfiture of his army (1477). Of the inheritance of Charles, Louis at once seized the duchy of Burgundy proper, Franche Comté, Artois, and the cities along the Somme. Maximilian of Austria, the husband of Charles's daughter Mary, made war upon Louis for the recovery of these possessions. Gaining an indecisive victory at Guinegate (1479), he had finally to yield to the superiority of the king, who by the treaty of Arras (1482) preserved his conquests, partly unconditionally, partly as the dower of young Margaret of Austria, the daughter of Maximilian and Mary, to whom he betrothed his son. Meanwhile he had triumphed over nearly all his other enemies. He had retaken Perpignan from John II. of Aragon, thus preparing the ultimate annexation of Roussillon and Cerdagne to France; and he had in 1475 concluded with Edward IV. of England the treaty of Pecquigny. But above all he had crushed the most troublesome feudal houses; the count of Armagnac fell in 1478, treacher-

ously murdered; the duke of Alençon was in 1474 thrown into prison, where he died; the great constable Louis de Luxembourg, count of St. Pöl, delivered up to Louis by the duke of Burgundy himself, was beheaded in 1475; and finally in 1477 Jacques d'Armagnac, duke of Nemours, met the same fate, after being previously subjected to the horrors of confinement in an iron cage. By treaties and inheritance Louis secured the rich patrimony of the house of Anjou, including the provinces of Anjou, Maine, and Provence, beside its claims to the crown of the Two Sicilies. He had thus considerably enlarged the royal domain, and prepared the way for the territorial unity of France. More than any of his predecessors, he strengthened royal authority and made his government respected at home; he had a standing army more numerous than any before in existence, and greatly improved the fortified towns. He tried to give regularity to the civil administration, and in order to secure the punctual transmission of orders to all parts of his kingdom, he established a permanent service of despatch carriers, which was the foundation of the postal system of France. He improved the administration of justice, especially by creating 8 new parliaments, those of Grenoble in 1458, of Bordeaux in 1462, and of Dijon in 1477. He thought even of introducing uniformity in legislation all over France, as well as in the use of weights and measures; but these two fundamental reforms were left to be accomplished 3 centuries later by the French convention. He increased public taxes, but part of the revenue was expended in a way to benefit the nation itself; he gave particular attention to improving public roads and canals; fostered the commercial marine; opened new markets for commerce; brought skillful workmen from Greece and Italy, and encouraged manufactures and mining. He favored the great invention of the 15th century by establishing printing offices at Lyons, Angers, Poitiers, Caen, &c.; and contributed to the diffusion of learning by the establishment of universities at Valence, Bourges, and Besançon. But notwithstanding the services thus rendered to France, and his comparatively mild treatment of the middle classes, he never gained popularity; his craftiness, his perfidious and cruel temper, and his total want of royal dignity, inspired the whole nation with feelings of fear and disgust, amounting to unmitigated hatred; and although Comines insists that he was the best prince of his time, history is unable entirely to rehabilitate his memory. He spent his later years at the castle of Plessis-les-Tours, under the absolute control of his physician Cottier; and shortly before his death he summoned St. Francis of Paula to come to him and intercede for the prolongation of his life. He is said to be at least partly the author of the *Cent nouvelles nouvelles*, a collection of novels mostly borrowed from Boccaccio, and of the *Roi des guerres*. The *Mémoires* of Comines give the full history of this extraordinary prince,

who has attracted the particular attention of Siamondi, Michelet, and Henri Martin. He has also been well described in Barante's *Histoire des ducs de Bourgogne*; while Sir Walter Scott in his "Quentin Durward," and Victor Hugo in his *Notre Dame de Paris*, have portrayed him at two different periods of his life.

LOUIS XII., king of France, the 8th of the house of Valois, born in Blois in 1462, died in 1515. The son of Duke Charles of Orleans, and great-grandson of Charles V., he was left an orphan when scarcely 2 years old, and was educated under the supervision of Louis XI., whose 2d daughter Jeanne he was constrained to marry in 1476. He at first led a dissipated life, but on the accession of Charles VIII. in 1483, the young king's eldest sister, Anne of Beaujeu, having seized upon the reins of power, Louis, who was the nearest heir to the throne, attempted to snatch them from her hands; he at first succeeded in having himself appointed lieutenant-general of the kingdom by the states-general held in 1484; but the crafty daughter of Louis XI. succeeded in defeating all his plans. He then resorted to arms, forming a powerful league among the nobles, and even securing an alliance with Richard III. of England; but Anne's decision and energy again proved her safeguard, and while helping Richmond in his expedition against the English monarch, she sent an army to Brittany, the stronghold of the confederates, who were defeated at St. Aubin-du-Cormier in 1487. Louis of Orleans, being captured, was imprisoned in the castle of Bourges, where it is said he was confined at night in an iron cage. At the end of 3 years he was released by Charles VIII., and proved a faithful servant to his liberator. In 1495 he accompanied Charles in his expedition to Italy, and was put in command at Asti. He rashly took advantage of this circumstance to enforce his claims to the duchy of Milan, in right of his grandmother, Valentina Visconti; but Ludovico Sforza defeated his plans and besieged him in Novara. The return of Charles VIII. from Naples and the victory of Fornovo (1495) extricated him from his difficult position, and he returned to France with the king. The latter dying without issue in 1498, the crown devolved by right upon Louis, now 36 years of age. On his accession, he generously declared that "the king of France would not avenge the wrongs done to the duke of Orleans," and welcomed even those who had previously opposed him. He gave his confidence to George of Amboise, a well meaning but short-sighted minister; and while their common efforts tended to promote the internal welfare of France, their foreign policy was injurious to it. Louis, having in 1499 obtained a divorce from his first wife, married Anne of Brittany, the widow of Charles VIII., thus securing the reunion of that duchy to France. He was now in close alliance with Pope Alexander VI., who had granted the divorce, and he undertook to make good his claims upon Milan. At the head of his army, he

achieved the conquest of the duchy within a few months, took Ludovico Sforza and sent him a prisoner to France, and assisted the pope and his son Cesare Borgia in their territorial aggressions. He concluded in 1500 a secret treaty at Granada with Ferdinand of Aragon, and, sending his army to Naples, shared that kingdom with his ally. Quarrels, however, soon arose between the conquerors, and Gonsalvo de Cordova defeated the French at Seminaria, Cerignola, and on the Garigliano, finally expelling them (1503) from southern Italy. In 1505, Anne of Brittany, availing herself of Louis's illness, concluded with Maximilian a treaty at Blois, by which she engaged to give her daughter Claude to the emperor's grandson (afterward the emperor Charles V.), with a dower consisting of not only the claims of the French king to Milan and Naples, but the two rich provinces of Brittany and Burgundy. Louis on his recovery broke off this treaty, and, yielding to the wishes of the states-general at Tours, betrothed Claude in 1506 to her cousin Francis of Angoulême, heir apparent to the crown. In 1508 he severely chastised the city of Genoa, which had asserted its freedom, and in 1509 formed an alliance with Maximilian, Ferdinand of Aragon, and Julius II., known as the "league of Cambrai," to crush the republic of Venice. The Venetians, conquered by him at Agnadello, were on the verge of ruin, when the pope (Julius II.) suddenly went over to their side, and brought about the "holy league," to which Maximilian, Henry VIII. of England, and Ferdinand adhered, in order to expel the French from Italy. The latter, under the command of Gaston de Foix, were at first successful, Gaston gaining 3 victories in 8 months; but his death at Ravenna in 1512 arrested their success, and being finally defeated at Novara in 1513, they lost all they still held in Italy. Louis had seduced the Venetians from their allies; but the other confederates made a league at Mechlin, and invaded France; the English routed the French *gendarmes* at Guinegate (1513); and Louis, being moreover threatened by the Swiss and the Spaniards, offered terms to his enemies, and the pacification was settled at Orleans (1514). The king, to secure his arrangements with England, consented to pay a pension of 100,000 crowns to Henry VIII., and to marry that king's sister Mary. A few months later he breathed his last, amid the universal sorrow of his nation, by whom he was styled the "father of the people." He had done much to improve their condition by promoting agriculture and commerce, reforming the administration of justice, and trying to lessen the taxes.

LOUIS XIII., king of France, the 2d of the house of Bourbon, born in Fontainebleau, Sept. 27, 1601, died in St. Germain-en-Laye, May 14, 1643. He was the eldest son of Henry IV. by Maria de' Medici, and succeeded his father in 1610 when only 9 years old, his mother exercising the regency during his minority. A weak woman and a tool in the hands of her Italian fa-

vorites, she was unable to preside over the education of the young king, whose time was spent in useless occupations. In 1615 he married Anne of Austria, daughter of Philip III. of Spain. Notwithstanding his submissive disposition, he got tired of his mother's favorite Concini, and resolved upon shaking off his yoke (1617); he gave orders for his arrest alive or dead, and when Concini was in consequence murdered on the bridge of the Louvre, the king showed himself at a window and exclaimed: "Thanks to you, my friends; now I am a king." He intrusted the affairs of state to his own favorite Albert de Luynes, whom he promoted to the rank of great constable. Although incapable of governing, Louis XIII. possessed great personal bravery, which he evinced in 1619 at the battle of the Pont-de-Cé, where he routed his mother's troops, and in 1621 at the siege of Montauban, which he endeavored to take from the Protestants. He concluded peace with the latter on the death of De Luynes, but found himself unable to check the disorder which prevailed all over the kingdom. He was therefore in 1624 reconciled to his mother, and admitted to his cabinet her chief adviser, Cardinal Richelieu. Thenceforth the king nearly disappeared behind his prime minister, who for 18 years controlled the destinies not only of France but of Europe. Louis' comparative insignificance has two redeeming points: his personal courage in war, and his high appreciation of Richelieu. In spite of all intrigues, and notwithstanding his own dislike of the man, he retained him in power until his death. He more than once placed himself at the head of his armies to support the policy of his minister, and on such occasions deserved general admiration by his valor and sometimes by his military talents; he distinguished himself during the siege of La Rochelle, 1627-'8; in the following year he devised and conducted a most brilliant attack at the Pas de Suze, against the duke of Savoy; and finally, in 1636, his self-possession and firmness saved France from invasion; he advanced toward the allied army, which had already taken Corbie in Picardy, retook that town, and obliged the enemy to retreat. He liked seclusion, and contented himself with the society of a few friends. Some ladies attracted his attention, Mlle. de Lafayette and Mme. de Hautefort among the number; but so great was his reputation for chastity that their virtue was never questioned. Music, drawing, and mechanical arts filled such of his hours as were not devoted to hunting and pious reading. It was not until he had been married 22 years that he became a father.

LOUIS XIV., called the Great, king of France, born at St. Germain-en-Laye, Sept. 16, 1638, died at Versailles, Sept. 1, 1715. He was the eldest son of Louis XIII. and of Anne of Austria. His mother had been married and childless for 22 years, and was an object of aversion to her husband. A temporary reconciliation took place toward the end of 1637, and

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the birth of Louis XIV. in the succeeding year occasioned the greatest demonstrations of joy among the people, who gave to him the appellation of *Dieu-donné* or God-given. He was 5 years old when his father died, and his mother became regent with Cardinal Mazarin for prime minister. At the time of his accession France was in a very distracted condition. Laws and jurisdictions were unsettled and undefined; many cities and fortresses were held by individuals possessing in certain districts a greater power than the crown itself; detached portions of other countries interrupted the natural limits of France and broke its geographical unity; war existed with Spain and Germany, and every part of the frontier was menaced by powerful armies; the finances were scanty and ill regulated, and a general grossness of manners and depravity of morals pervaded all classes of society. The infant king's amusements were all of a military kind. He delighted in handling arms and in beating drums. His intellectual education was neglected, but much attention was paid to his physical development, and his natural vanity, egotism, and haughtiness were encouraged rather than checked by his mother and his tutors. The avarice of Cardinal Mazarin induced him to stint the allowance and equipage of the young monarch, who slept upon worn and ragged sheets, and had a most unbecoming and insufficient wardrobe. The personal neglect with which he was treated, and the general contempt for the royal authority during the troubles of the Fronde, made a strong impression on his mind at this period, when for several years he was a passive instrument in the hands of an intriguing minister and a factious nobility, often forced to fly before triumphant rebels, and to wander a fugitive over his kingdom. It was not until 1652 that he was able to reside undisturbed in Paris, and the recollection of these scenes of anarchy gave him a love of order and of strong government which he carried subsequently to despotism, and an aversion to the turbulent metropolis which finally led him to transfer the seat of government to Versailles. In 1651, at the age of 14, Louis declared himself of age, and took full possession of the royal authority. He manifested at even this early period much discernment and soundness of judgment; but, with the exception of his devotional exercises, sufficient military skill to review his troops, and a perfect familiarity with court etiquette, he was extremely ignorant of affairs of state, which had been purposely kept from his inspection. In 1658 the young king, under the orders of Turenne, accompanied the army in a campaign against the rebellious prince of Condé, who was besieging Arras; and the raising of the siege of that city put an end to the contests of the Fronde. In 1659 peace was concluded with Spain by the treaty of the Pyrénées; and in fulfilment of an article of the treaty Louis in 1660 married Maria Theresa, daughter of Philip IV. She was handsome and good-natured, but weak in intellect, and the king had little affection

for her, though he treated her with invariable respect and consideration. Mazarin died in 1661, after having ruled France for 18 years. Louis decided henceforth to be his own prime minister; and when he was waited upon after the death of the cardinal by the functionaries of state, and asked to whom they must in future address themselves on questions of public business, the king replied, much to their astonishment: "To myself." Not one seems to have suspected that Louis, who had been remarkable hitherto for his love of gayety and pleasure, and for his supine obedience to the guidance of Mazarin, would suddenly rouse from his lethargy and assume the burden of government. His first business was to institute, with the assistance of Colbert, a rigid scrutiny into the condition of the finances. Fouquet, a man of brilliant ability, who had long been minister of finance, had accumulated an enormous fortune by peculation. By order of the king he was arrested, Sept. 5, 1661, brought to trial, convicted, and condemned to perpetual imprisonment. He was succeeded by Colbert, under whose administration order was restored in the finances, the revenue greatly increased, manufactures established, and every species of internal improvement promoted. In foreign affairs, the first act of Louis announced to the world that the government of France had passed into very different hands from those of Mazarin, whose domestic difficulties had compelled him to conciliate as much as possible the surrounding powers, and that henceforth the king of France was determined to make himself respected by his neighbors. In 1661 a quarrel broke out at London between D'Estrades, the French ambassador at the English court, and Vatteville, the Spanish ambassador. The latter claimed precedence of the former on the ground that Spain stood higher than France in the scale of nations. An encounter took place between their respective retinues during a public procession, which resulted in the discomfiture of the French ambassador, whose carriage was broken to pieces, his horses killed, and his son and several of his attendants wounded, while the Spanish ambassador forcibly took precedence in the procession. The indignation of Louis when he received the news of this insult was extreme. He immediately ordered the Spanish ambassador at his own court to quit France, recalled the French ambassador from Madrid, and sent a message to the king of Spain declaring that if he did not at once admit the right of France to precedence and make a formal apology for the outrage at London, he might prepare for immediate war. The Spanish monarch yielded to this threat, and sent a special ambassador, who on March 24, 1662, waited upon Louis at Fontainebleau, and, in the presence of all the foreign ministers then resident at the court, declared, in the name of his royal master, that henceforward the Spanish ambassadors should never compete with those of France. This triumph over the Spanish monarch was followed by a still greater

one over the pope, Alexander VII. The duke de Créquy, French ambassador at Rome, got into a quarrel with the pope's brother and with the papal guards, in which some of the ambassador's servants were wounded and one killed. The pope made such reparation as would have satisfied any of the French king's predecessors; some of the guards were hanged, and the governor of Rome dismissed from office for not having prevented the riot. Louis, however, demanded ampler atonement, and began to march troops toward the Italian frontier. The pope became frightened, and at length consented to disband his guard, to exile his brother, to send a cardinal to Paris to make a formal apology, and to build a monument in Rome recording the offence and its reparation. The energy and determination displayed by Louis in these affairs made a deep impression on the whole of Europe, and, with the increasing order and prosperity of France, made him greatly admired and beloved at home. His power in his own kingdom was now entirely absolute; his famous saying: *L'état c'est moi*, "I am the state," was literally true. His administration was efficiently supported by accomplished statesmen and great generals. The internal affairs, directed by Colbert, and the department of war by Louvois, were both in the highest state of order and efficiency; and a powerful navy commanded by the gallant duke of Beaufort, the grandson of Henry IV., maintained the power of France upon the ocean. The other nations of Europe were at the time distracted and enfeebled by internal evils or foreign dangers. The careless and profligate Charles II. of England was privately a pensioner of the French king, and the ancient rival of France was demoralized and betrayed by its own rulers; Spain, though her prodigious empire was yet unbroken in extent, was harassed and weakened by dissensions among her ill-compacted constituent kingdoms; Germany was divided by religious animosities; and Holland was torn by internal factions, and was wasting her energies in attempts at conquest in Brazil. In France, on the other hand, the policy of Richelieu and Mazarin, notwithstanding the civil commotions stirred up against the latter by the turbulent leaders of the Fronde, had at length completely triumphed, and there was no longer among either the people or the aristocracy any serious opposition to the royal authority. The ability unexpectedly displayed by the king, the grace and dignity of his person, the weariness which the nation felt of civil contentions, the change from poverty and distress to prosperity and abundance produced by the reforms in the finances, and the humiliation of Spain and the pope, all tended to increase the power of the crown and to render the people submissive and contented. The nobles, whose turbulence and feudal independence had been hitherto the chief check upon the royal power, now turned courtiers and vied with each other in flattery and subserviency, and devotion to the king became as much a fashion as opposition to the court had been in

the times of the Fronde. The king himself labored zealously to promote not only the external dignity but the internal welfare of France. With the aid of Colbert and other able ministers, he made great and successful efforts to advance the agriculture, commerce, and manufactures of his kingdom, to improve the roads and means of travelling, and to foster literature, science, and the arts. A large proportion of the great monuments of France had their origin in his reign; among others, the stupendous harbors, ship yards, and fortifications of Brest, Rochefort, Lorient, Havre, Dunkirk, Cetta, and Toulon; the canal of Languedoc, which unites the Atlantic with the Mediterranean, was constructed by his orders. In 1663 the academy of inscriptions and belles-lettres was founded, and in 1666 the academy of sciences, and eminent foreign men of science were invited to take up their abode in France. Cassini was called from Italy, Huyghens from Holland, and Römer from Denmark. An observatory was erected at Paris, and apartments assigned to the academy of sciences in the palace of the Louvre. An academy of painting and sculpture was also founded at Paris, and in 1667 the French academy of art was established at Rome for the benefit of young French artists. Beside the foundation of these permanent institutions to carry on the progress of the arts and sciences through a long series of future years, a vast number of detached acts of Louis all tended to the same general object. Every man distinguished in letters or in art was rewarded with substantial benefits; large sums were set apart for increasing the royal library; men of learning and discrimination were sent to every part of the world to collect books, manuscripts, and antiques; and 19 professorships were founded in the royal college. Many of the narrow and dark streets which deformed Paris were cleared away, and splendid buildings erected in their stead, while almost the whole of the city was repaved and relighted, and regulations made for its cleanliness, and the police so reorganized and strengthened that it soon became the most orderly and secure capital in Europe. **Reforms** of still greater importance were made by the promulgation, Feb. 10, 1667, of the famous *ordonnance civile*, which created a great and beneficial change in the whole body of French law, and swept away a mass of abuses and absurdities which had been accumulating for ages. This was followed by an improved criminal code in 1670, and subsequently by the regulation of commercial law and by the abolition of local jurisdictions belonging to the great nobles. In his foreign policy, Louis purchased Dunkirk from Charles II. of England for 5,000,000 livres in 1662, covertly aided Portugal against Spain in 1665, notwithstanding his treaty obligations to the latter power, concluded a commercial alliance with Holland in 1666, and aided that republic against England during the war of 1665-'7. At the same time his

the Barbary pirates, and humbled the Algerines, who were compelled to set free their Christian slaves. After long negotiations with the duke of Lorraine, Louis himself in 1667 marched into the territories of that prince and forced him to cede the town of Marsal to France. In 1665 Philip IV. of Spain died, and Louis raised a claim to the Spanish possessions in the Netherlands on behalf of his wife, the daughter of Philip. In support of this claim he suddenly invaded Flanders at the head of an army of 85,000 men, and in 3 weeks had taken a dozen important towns, including the strongly fortified city of Lille, which after a siege of 9 days had surrendered to Louis in person. These rapid conquests alarmed the whole of Europe, and created an impression never effaced that Louis was aiming at universal dominion. A triple alliance was formed, Jan. 23, 1668, between Holland, England, and Sweden, for the purpose of obliging France and Spain to make peace. Louis, however, continued his career of conquest, and in Feb. 1668, Franche Comté was invaded by an army led by the great Condé assisted by the king, and in 14 days the whole of that province had submitted. The commissioners of Sweden, Holland, and England now met at Aix la Chapelle with those of France and Spain, and a treaty was signed, May 2, 1668, by which the important and strongly fortified territory known afterward as French Flanders was retained by Louis, and Franche Comté, which was entirely surrounded by his own dominions and was at his mercy whenever he chose to take it, was restored to Spain. Louis now turned his attention to breaking up by diplomacy the coalition against him, which had extended to the German states, and his success in this field was not less signal than his recent success in war. The electors of Cologne and Hanover, the bishops of Münster, Osnabrück, and Strasbourg, and the king of Sweden were gained over, and Spain itself was partially conciliated. The great object of his policy at this time, however, was to detach England from her alliance with Holland, in order that his growing navy might not be crushed by the power of the two chief maritime states of Europe. This was skilfully effected by bribing the English cabinet, and by playing off upon Charles II. not only the seductions of French gold, but the influence of his sister Henrietta, the duchess of Orleans, and the charms of Mlle. de Querouailles, who afterward became the notorious duchess of Portsmouth. On May 22, 1670, a treaty was signed at Dover, by which the king of England became a pensioner of France, and promised to make war upon his ally the Dutch republic. In the same year Louis resumed military operations by taking possession of Lorraine. In 1672 Charles began his promised war on the Dutch by an attack upon their Smyrna fleet as it was passing through the English channel. Louis in person invaded Holland at the head of 100,000 men, accompanied by Turenne, Condé, Vauban, and Louvois,

and speedily made himself master of 8 provinces and 40 fortresses. He behaved throughout the campaign with marked clemency to his prisoners and to the peaceful population. No plunder was permitted, and whatever was taken for the use of the army was amply paid for. His activity and courage were also conspicuous. He frequently exposed himself to the fire of the enemy, went to bed late, rose at 3 A. M., and gave almost every moment to the performance of his duties as king and general. The Dutch, alarmed at the rapid progress of the French, sent deputies to sue for peace. Louis demanded an indemnity of 20,000,000 livres, the cession of extensive territories, the public exercise of the Catholic religion throughout the United Provinces, and other severe and humiliating conditions. The ancient spirit of the Dutch rose at these demands, and they resolved to perish rather than submit. The grand pensionary De Witt, who counselled submission, was torn to pieces by the people. William of Orange was elected stadtholder and commander-in-chief, and the dikes which shut out the ocean were cut in several places, and the country covered with water, which, though it ruined the land, effectually impeded the progress of the invaders. Preparations were also made to transport in the last emergency the whole nation to the East Indies. Meantime the progress of Louis had again roused the jealousy of other nations, and formidable alliances were rapidly forming against France. The emperor of Germany sent 20,000 men under the famous Montecuculi to join the great elector of Brandenburg, the founder of the military power of Prussia, who had already taken the field with 80,000 troops for the relief of Holland; Spain herself was making exertions for the same purpose, and had raised 15,000 men to reinforce the prince of Orange; and even the debased English court, pressed by the murmurs of the people, who could not see with indifference a Protestant country conquered by a Catholic monarch, began to waver in its subserviency. Louis, leaving Vauban to fortify the places he had taken, hastened to Paris to devise measures to counteract the combinations against him. He provided with prompt vigor for the preservation of his conquests and for the defence of his eastern frontier against the Germans. A war of several years followed, in which the French armies, led by Turenne, Condé, Luxembourg, and other great generals, combated more or less successfully against the forces of half of Europe. Louis himself, in June, 1678, commanded at the siege and capture of Maestricht; and in 1674 he led an army to the conquest of Franche Comté, which was now permanently annexed to France. In this year the devastation of the Palatinate by the army of Turenne, under orders from Louvois, brought upon Louis general execration. In 1676-'7-'8 the king made brilliant campaigns in Flanders, and took in person the towns of Condé, Bouchain, Valenciennes, Cambray, Ghent, and Ypres. The war was at length concluded by the peace of Nime-

guen, Aug. 10, 1678, by which Louis retained Franche Comté, French Flanders, Alsace, and some of his conquests on the Rhine. The negotiations were in great part carried on directly by himself, and his letters during their progress exhibit his diplomatic abilities in a very favorable light. He did not suffer Europe to remain long at peace. In 1680 he advanced claims to various German territories, and in Sept. 1681, seized by force upon the important city of Strasbourg. This led to war with the German empire and with Spain, which resulted in the acquisition by France of the town and territory of Luxemburg, which were confirmed to Louis by the treaty of Ratisbon, Aug. 1684. The prince of Orange was unwearied in his efforts to array Europe in opposition to the ambitious designs of the French monarch, whose schemes of aggrandizement were now clearly manifested; and in 1686 the league of Augsburg was formed, by which Holland, Austria, Spain, Bavaria, and Savoy formed a coalition against France. Louis prepared with his usual energy for the contest, which he began himself in Sept. 1688, by invading and overturning the Palatinate, which was again desolated with fire and sword in the most cruel and barbarous manner. These atrocities, however, like those of the former war, were committed by order of Louvois, and were strongly condemned by the king when they came to his knowledge. In the war that ensued, his armies, no longer led by Condé and Turenne, met with severe reverses. Colbert was dead (Sept. 6, 1683), and France was beginning to feel seriously the immense expenses of war, carried on as it was by Louis with standing armies of a magnitude unknown in Europe since the days of the Romans. The treasury was exhausted, and to replenish it the king and the principal nobles sent their plate to the mint, and various other extreme means were resorted to. As the war advanced, the military genius of the duke of Luxembourg redeemed the honor of the French arms at Leuze, Steenkirk, Neerwinden, and in other battles. The English revolution of 1688 had raised to the throne of Great Britain the prince of Orange, the ablest and most determined of the enemies of Louis, and had added the forces of that kingdom to the coalition against France. The war continued with mingled success and reverses on the part of Louis till Sept. 1697, when it was terminated by the peace of Ryswick. By the treaties here made, Louis granted to the Dutch extraordinary commercial privileges, and regained from them Pondicherry in India; to Spain he restored his conquests in Catalonia, and a large part of Flanders, with many strong fortresses; to the Germans he restored all that he had taken; he gave up Lorraine to its legitimate sovereign, and lastly recognized William III. as king of England. Charles II. of Spain died Nov. 1, 1700, and, having no heir, left his crown by will to Philip, duke of Anjou, grandson of Louis, a testament accepted by the French king, with the ominous remark that "the Pyrénées no longer

existed." This event set all Europe in commotion, and led in the following year to the war of the Spanish succession, Austria, England, Holland, Prussia, and Hanover having formed an alliance against France. This great struggle was in the end eminently disastrous to Louis, who saw his armies defeated, his fleets destroyed, his kingdom invaded, his resources exhausted, and France distressed by famine, caused by the most rigorous winter ever known in Europe. He therefore sought for peace, and after rejecting with haughty disdain the severe and humiliating conditions at first demanded by the triumphant allies, succeeded by skilful diplomacy in effecting the treaties of Utrecht, April 11, 1713, with Holland and England, and in the following year the treaty of Rastadt with the German empire. These were the last important events in the foreign policy of the reign of Louis. In the internal history of France during the portion of his reign of which we have related the foreign history, the most striking events were the outbreak of poisoning in Paris, for an account of which see *BRINVILLIERS*; the tragical death of Henrietta of England; the revocation of the edict of Nantes, Oct. 22, 1685, and the subsequent persecution of the Protestants; the revolt of the Camisards in 1703; the building of the magnificent palace of Versailles; and the singular and mysterious detention of the Man in the Iron Mask. During the greater part of his reign the mistresses of Louis XIV. played an important and often a conspicuous part in the affairs of his brilliant court. The most noted of these were the duchess de La Vallière and the marchioness de Montespan, by both of whom he had several children, who were acknowledged and legitimized. His queen, Maria Theresa, died July 30, 1683, and in the year 1685 or 1686 Louis was privately married to Mme. de Maintenon, whom he had in vain sought to make his mistress, and who exercised over him a powerful influence which ended only with his life.—The reign of Louis XIV. has been styled the Augustan age of France, and it will certainly ever be illustrious from the splendid array of great men whom the king assembled around his throne. We have already mentioned his great ministers Colbert and Louvois. Among his generals, beside Turenne, Condé, and Luxembourg, were Oatinat, Oréqui, Boufflers, Montesquiou, Vendôme, and Villars, all of them eminent soldiers; his distinguished naval commanders were Châteaurenault, Duquesne, Tourville, and Duguay-Trouin; Molé, Lamoignon, Talon, and D'Aguesseau were among the civilians of his reign; Vauban and Riquet were his engineers; Perrault, Mansart, and Blondel his architects; Le Notre his landscape gardener; and Puget, Girardon, Poussin, Claude Lorraine, Le Sueur, Le Brun, and the two Mignards were among his sculptors and painters. In the list of the literary notabilities of his reign are the names of Corneille, Racine, Molière, Quinault, La Fontaine, La Bruyère, Boileau, Bossuet, Bourdaloue, Massillon, Fénelon, Fléchier, Fleury, and

Mme. de Sévigné, most of whom still hold a place in the foremost rank of French authors. At an early period of his reign Louis XIV. established at his court a most rigid system of etiquette, which he regarded as of the greatest importance and always maintained with jealous care. He rose at 8 o'clock, performed his devotions, and was dressed by his valets in presence of a crowd of courtiers, and then read for an hour, at the close of which time he breakfasted. He left his chamber at 10, attended the council and heard mass at 12. From noon until 1 o'clock he appeared in public. At 1 he dined, seated alone at the table, and waited on by the highest officers of the court. After dinner he spent some time with the royal family, and then held conferences with his ministers; afterward he received petitions and gave audiences, during which he exhibited great urbanity and patience. The rest of the afternoon was spent in conversation, in driving, at the theatre, or the card table. At supper, which was his favorite repast, he collected about him all the princesses and their ladies of honor, and passed the evening in conversation and amusements. In person the king was about 5 feet 8 inches in height, but had the art by his dress and carriage to appear much taller, and was universally admired by his contemporaries for his majestic air. His features were large and handsome, and his manner singularly grave and commanding. In the latter part of his life he became pious, and devoted much time to his religious duties. His old age was embittered by the reverses of his armies, by the deaths of his children and grandchildren, and by remorse for the vices of his early life. His last words to his great-grandson who succeeded him were: "My child, you are about to become a great king; do not imitate me either in my taste for building or in my love of war. Endeavor, on the contrary, to live in peace with the neighboring nations; render to God all that you owe him, and cause his name to be honored by your subjects. Strive also to relieve the burdens of your people, which I myself have been unable to do." G. P. R. James, in his "Life and Times of Louis XIV.," says: "The character of Louis XIV. has been a subject of dispute ever since his eyes were closed. . . . That he committed many errors there can be no doubt; but he had many high qualities both of the mind and of the heart; and it is not a little to say of him that, though he had struggled with faction in his youth, rendered himself despotic in his prime, and met with bitter griefs, disappointments, and anxieties in his decline, he never showed the slightest trait of a sanguinary disposition in youth, in manhood, or in old age. That he was ambitious to excess, no one who reads his history can hesitate to admit; but that he ever dreamed of universal dominion few will now believe; and though his object was certainly his own aggrandizement, rather than the aggrandizement of his country, yet he undoubtedly saw and sought the means of raising his own glory

in conjunction with the glory of the state. A hundred years are not near sufficient to clear the mind of party prejudices, and Louis XIV., over-estimated in his own day, is certainly rated too low at present. . . . That he had active and that he had passive courage is clear; in youth he exposed himself on all occasions to the fire of the enemy; in age he never shunned any of those contagious sicknesses which desolated his family and swept off the young around him. In prosperity he more than once forgot himself, and the despot spoke out when he had conquered; but in adversity there was not the corresponding depression which is the sign of a weak mind; and he bore reverse more nobly than success. He was firm and steady in his attachments, guarding himself carefully against his own prejudices and against the prejudices of others. Though he often rewarded success as a merit, he never punished misfortune as a fault; he was ever mild toward error, when it was not viewed through the medium of bigotry, and in his own nature was forgiving and of long endurance. He bore contradiction with calmness, and endured even insolence with extraordinary moderation. In his nature he was mild and not sanguinary, and during a reign of 70 years with despotic power, there are fewer occasions mentioned on which the crime of high treason was punished with death than in any equal period in the history of France." On the other hand, a recent English writer, Henry Thomas Buckle, in his "History of Civilization in England," says: "The reign of Louis XIV. must be utterly condemned if it is tried even by the lowest standard, of morals, of honor, or of interest. A coarse and unbridled profligacy, followed by the meanest and most grovelling superstition, characterized his private life; while in his public career he displayed an arrogance and a systematic perfidy which eventually roused the anger of all Europe, and brought upon France sharp and signal retribution. As to his domestic policy, he formed a strict alliance with the church; and although he resisted the authority of the pope, he willingly left his subjects to be oppressed by the tyranny of the clergy. To them he abandoned every thing except the exercise of his own prerogative. Led on by them, he, from the moment he assumed the government, began to encroach upon those religious liberties, of which Henry IV. had laid the foundation, and which down to this period had been preserved intact. It was at the instigation of the clergy that he revoked the edict of Nantes, by which the principle of toleration had for nearly a century been incorporated with the law of the land. It was at their instigation that, just before this outrage upon the most sacred rights of his subjects, he, in order to terrify the Protestants into conversion, suddenly let loose upon them whole troops of dissolute soldiers, who were allowed to practise the most revolting cruelties. The frightful barbarities which followed are related by authentic writers; and of the effect produced on the material in-

terests of the nation, some idea may be formed from the fact that these religious persecutions cost France half a million of her most industrious inhabitants, who fled to different parts, taking with them those habits of labor and that knowledge and experience in their respective trades, which had hitherto been employed in enriching their own country. These things are notorious, they are incontestable, and they lie on the surface of history. Yet in the face of them there are still found men who hold up for admiration the age of Louis XIV. Although it is well known that in his reign every vestige of liberty was destroyed; that the people were weighed down by an insufferable taxation; that their children were torn from them by tens of thousands to swell the royal armies; that the resources of the country were squandered to an unprecedented extent; that a despotism of the worst kind was firmly established; although all this is universally admitted, yet there are writers, even in our own day, who are so infatuated with the glories of literature as to balance them against the most enormous crimes, and who will forgive every injury inflicted by a prince during whose life there were produced the letters of Pascal, the orations of Bossuet, the comedies of Molière, and the tragedies of Racine."—The most noted French works upon this reign are Voltaire's *Siècle de Louis XIV.*, St. Simon's *Mémoires*, and *Louis XIV. et son siècle*, by Alexandre Dumas. Beside the work by James already mentioned, there is in English "Louis XIV. and the Court of France in the 17th Century," by Miss Pardoe (London and New York, 1855).

LOUIS XV., king of France, great-grandson and successor of the preceding, born at Versailles, Feb. 15, 1710, died there, May 10, 1774. He was the third son of Louis, duke of Burgundy, and of Maria Adelaide of Savoy. He bore at first the title of duke of Anjou, and afterward of dauphin. The will of Louis XIV. had provided that during the minority of his successor the kingdom should be governed by a regency, with the duke of Orleans, cousin of the young king, at its head. Orleans, however, induced the parliament of Paris to set aside the will and declare him sole regent as first prince of the blood. The beginning of the regent's administration was judicious and popular. He restored to the parliament some of the rights which it had lost in the preceding reigns, and took measures to promote agriculture, commerce, and the other material interests of the country. Though the intrigues of Cardinal Alberoni, the ambitious and able Spanish minister, drove France into war with Spain (1719-'21), the policy of the regent was on the whole pacific. He engaged with eagerness in the financial and commercial schemes of Law, which finally threw the country into confusion and produced almost universal bankruptcy. (See LAW, JOHN.) In 1723 Louis was declared to be of age, and the regent became prime minister; but his excessive debauchery had ruined his

constitution, and he died the same year. The duke of Bourbon succeeded him as minister. He was in turn succeeded by Cardinal Fleury, who had been tutor to the king in childhood, and had won the love and confidence of his pupil. In Sept. 1735, the king was married to Maria Leszczyńska, daughter of Stanislas, ex-king of Poland, a princess of little personal beauty, but of amiable disposition and most exemplary and pious life. The policy of Fleury was even more pacific than that of Orleans. He was so averse to war, that even when compelled to undertake it he carried it on without vigor and with most reluctant acquiescence in the necessary expenditures. He labored incessantly to preserve peace among his neighbors, and hostilities in Europe were repeatedly averted by his mediation. In 1733 Augustus II. of Poland died, and Stanislas, the father-in-law of Louis, claimed the vacant throne. His pretensions were supported by France, and those of Frederick Augustus of Saxony by Austria and Russia. This led to war (1733-'5), in which the French armies won several victories; and though Stanislas failed to recover the kingdom of Poland, he acquired the duchy of Lorraine, which he ruled in an enlightened and beneficent manner till his death in 1766. The disputes relating to the Austrian succession, which followed the death of the emperor Charles VI. in 1740, involved France again in war, as Louis, who had some claims himself to the succession, maintained the claims of Charles Albert, elector of Bavaria, against those of Maria Theresa, who was supported by England. During the first year of this war the French armies were beaten and driven out of Bohemia and Bavaria, and the navy, which had been neglected by the parsimonious Fleury, suffered greatly from the English fleets. But the genius of Marshal Saxe restored the honor of the French arms in the victories of Fontenoy, Rancoux, and Laffeld, by which the Austrian Netherlands were almost entirely conquered (1745-'7). The war ended by the peace of Aix la Chapelle, Oct. 18, 1748, and resulted in no gain to France but military fame, though the treaty gave her back Louisburg in America, which had been taken by the New Englanders in 1745. The aged Fleury died in 1748, and Louis, declaring that he meant henceforth to govern without a prime minister, and to command his troops in person, joined his army and shared in the dangers of Fontenoy. But this ebullition of energy soon passed away. For several years after his marriage he had shown a regard for chastity and decency unusual among the monarchs of Europe at that period; but about 1757 his profligate courtiers had systematically exerted themselves to corrupt his principles and his life. They ultimately succeeded, and Louis plunged into the grossest debauchery. Multitudes of ladies became suitors for the royal favor, and the highest nobles of France emulated each other in their endeavors to have the honor of pandering to the appetites of the mon-

arch. The queen was wholly neglected, and the history of the government soon became intimately connected with the changes of the king's mistresses. The most noted of these were Châteauroux, Pompadour, and Du Barry. The debaucheries of the king culminated at length in the establishment at Versailles of the *parc aux cerfs*, or deer park, as it was facetiously called, a harem in which were kept for the pleasures of the king a number of young girls enticed or torn from their homes by the royal agents. They were changed in rapid succession, and Louis spent much of his time in teaching them to read and write, and in instructing them in religious matters. He was in the habit of praying with them, and after he became tired of their charms took pains to have them married, and gave them each a considerable dower. In 1756 disputes with England about the boundaries of the French and English territories in America resulted in the 7 years' war (1756-'68), in which France lost Quebec and Canada by the victory of Wolfe over Montcalm, Sept. 13-18, 1759, lost India by the victories of Clive, and lost her navy by the victories of Hawke and other English admirals. The French armies were beaten at Rossbach and at Minden; and at last, by the peace of Paris, Feb. 1763, France ceded to England Canada, Nova Scotia, all the rest of her possessions in North America east of the Mississippi, and the islands of Grenada, Dominica, and Tobago in the West Indies. She came out of the contest humiliated and disgraced, with her finances exhausted and her foreign commerce nearly destroyed. During the war an attempt by a fanatic named Damiens to assassinate the king revived for a time the popularity which Louis had lost by his misconduct; but the unfortunate issue of the contest and the ensuing distress tended much to alienate the people from the crown. Internally the kingdom was greatly disturbed by contests between the ecclesiastical and civil authorities, growing out of attempts on the part of the clergy to enforce the papal bull *Unigenitus*, which were resisted by the parliaments. The king was at length induced to banish the Jesuits, whose quarrel with the Jansenists had fomented these dissensions. The parliament of Provence having issued a decree depriving the pope of Avignon and the county of Venaissin, which had long belonged to the holy see, Louis seized those territories in 1768; in the same year Genoa ceded Corsica to France, though the French troops did not succeed in subduing the island till the following year. The rest of this reign was occupied by struggles between the king and the parliaments, in which the royal authority finally triumphed. Louis, however, did not long enjoy his triumph. A young girl with whom he had a transient amour communicated to him the small pox, which, together with a shameful malady from which he was already suffering, caused his death in a few days. His personal vices and his misgovernment had pre-

pared the way for the overthrow of the monarchy, which carried with it to destruction his innocent successor. Louis XV. was himself fully aware of the perilous state of the kingdom, and his only anxiety in his latter years was that the tottering fabric should last as long as he did. His lusts and extravagances and his needless and costly wars had exhausted the treasury and increased the burden of debt and taxation; and as all the taxes and imposts pressed entirely upon the citizens and peasants, while the wealthy nobles and the clergy were exempt, the middle classes were heavily burdened, especially as the government did not collect the revenues itself, but sold them to the extortionate and unscrupulous farmers-general. In spite, however, of the national distress and the general confusion of affairs, a great intellectual movement was apparent in France during this reign, and the third estate, as the middle classes were called, gradually acquired by its wealth and intelligence a considerable degree of social and political influence. A spirit of boldness, mingled with levity in thought and intellectual speculation, was strikingly manifested in conversation and literature. Every thing was doubted, every thing attacked, and the shameless corruption which pervaded both church and state provoked a criticism whose searching inquiry spared neither religion nor social order nor the political organization of the country. The sceptical tendency of the times manifested itself in great writers like Voltaire, Rousseau, Diderot, D'Alembert, Condillac, and Helvetius, and in works like the great *Dictionnaire encyclopédique*, which produced an immense agitation in the public mind. The excesses of the court and of the clergy, exposed and satirized by the wits and authors, debased the monarchy and the church in the eyes of the people, and brought about an intellectual revolution which was the precursor and the cause of the political revolution which took place in the succeeding reign.

LOUIS XVI., grandson and successor of the preceding, born at Versailles, Aug. 23, 1754, guillotined at Paris, Jan. 21, 1793. He was the third son of the dauphin Louis and of Maria Josepha, daughter of Frederic Augustus, king of Poland and elector of Saxony. Before his accession he bore the title of duke of Berry. He had a vigorous physical constitution, and his features were not without dignity; but he had none of the grace of manner which had marked his immediate predecessors on the throne. He was awkward, reserved, taciturn, and without decision of character. In confidential intercourse alone he spoke with sense and intelligence, but in public his diffidence prevented him from doing justice to himself. He was industrious, quick of comprehension, and had an extraordinary memory, which unhappily had been stored by his instructors with little else than useless knowledge. He was intentionally kept from acquaintance with affairs of state, though while dauphin he read much and wrote somewhat on historical matters, and was familiar

with geographical and chronological details. He had a fondness for mechanical pursuits, learned the trade of a locksmith, and took much interest in the mechanical part of printing. He printed himself, in 1766, 85 copies of *Maximes morales et politiques tirées de Télémaque*, which he had collected from Fénelon's romance; and he made also a translation of some portions of Gibbon's "Decline and Fall," which was published under the name of Le Clerc de Sept Chènes, who was his reader. On May 16, 1770, he was married to Marie Antoinette, archduchess of Austria; and on May 10, 1774, he became king by the death of his grandfather Louis XV. He appointed the aged count of Maurepas his minister of state, and Turgot minister of finance. Sartine, Malesherbes, and the counts of Vergennes and of Saint Germain were also made members of the cabinet. Various reforms were introduced, chiefly through the exertions of Turgot, and the most offensive feudal services and imposts were abolished in spite of a strong opposition on the part of the courtiers, the nobility, and the higher orders of the clergy. The people were conciliated by the recall of the parliaments, Nov. 12, 1774. The king set the example of economy and retrenchment by reducing his household expenses and the number of his guards. An edict declaring the internal trade in grain free, and the occurrence of a partial famine at the same time, produced serious riots, in the suppression of which several hundreds were killed by the military. The king on this occasion, though at first irresolute, showed at length both vigor and prudence, and the disturbances were quieted by the amnesty of May 17, 1775. In the following year the opposition to reform, supported by the queen, succeeded in effecting the withdrawal of Turgot from the cabinet; and after various changes, the finances were at length intrusted to the celebrated Necker, from whose skill and talent the highest expectations were entertained. When the war of the American revolution broke out, and the agents of the United States, Franklin and Deane, arrived in Paris to solicit aid for the struggling colonies, Louis, though sympathizing with the Americans, was averse to embarking in war on their account; but his pacific inclinations were at length overcome by the urgency of his ministers and of the queen, and by the enthusiasm of the court and people, and on Feb. 6, 1778, he concluded the treaty of alliance with the United States, which in a few months resulted in the declaration of hostilities between France and Great Britain. The war cost France about 1,400,000,000 livres; and beside the irreparable deficit it produced in the already disordered finances, it tended greatly to weaken the monarchy by diffusing republican and revolutionary ideas. Necker became by his attempts at reform so obnoxious to the court and the aristocracy that he was obliged to resign in 1781. He was succeeded by Calonne, whose extravagance was unbounded. The queen and the court gave themselves up to gayety and profusion,

with the exception of the king, whose tastes were simple and moderate, and who refused himself expensive indulgences which he granted to the queen and the princes of the blood. In 1785 a swindling trick by which, in the name of the queen used without her knowledge, a jeweller of Paris was defrauded of a diamond necklace of immense value, created much excitement, threw great scandal on the queen and court, and disgraced the throne in popular estimation. At length the king was persuaded to convene the assembly of the notables or principal nobility of the kingdom, in order to devise some means for raising money, the deficit in the finances having reached the sum of 140,000,000 livres. The notables met in Feb. 1787, but rejected the proposal of a universal taxation which should embrace both the nobles and the clergy, upon which Calonne resigned. His successor, Loménie de Brienne, was not more successful in grappling with the difficulties which beset the state, and was compelled to resign at a time when the scarcity of money had become so great that all cash payments were suspended and a state bankruptcy appeared inevitable. Necker, who was exceedingly popular, was recalled to the ministry in 1788; and the states-general, which had not met since 1614, were summoned, and assembled at Versailles, May 5, 1789. An order of the king fixed the number of noble and ecclesiastical members at 300 each, and that of the third estate or citizens at 600. A quarrel broke out between the three estates at their first sitting, and after a contest of some weeks the third estate declared itself (June 17) a national assembly, and was joined by portions of the other estates. The assembly began immediately a series of financial reforms which excited the greatest enthusiasm throughout France. Necker prepared a plan of a constitution for a limited monarchy like that of England; but the nobility persuaded the king to consent to violent measures, and on June 20 the hall of the assembly was closed by military force. The members, however, met in an adjoining tennis court and unanimously took an oath never to separate until the constitution of the kingdom and the regeneration of the public order were established on a solid basis. On June 28 a royal sitting was held, and Louis from the throne made a speech to the assembly, and proposed various important reforms and the establishment of constitutional rights, securing the liberties and privileges of the people. His concessions were received with coldness, and after the termination of the sitting he dissolved the assembly. The third estate, however, refused to be dissolved; and one of its most prominent members, Mirabeau, replied to the official who summoned them to obey the king: "Tell your master that we sit here by the power of the people, and that we are only to be driven out by the bayonet." The king yielded to this resolute resistance, the assembly remained in session, and the nobility and clergy, who had yielded to the mandate of dissolution, now returned and took their seats at the request of the

monarch. During these proceedings great excitement prevailed among the people of Paris. A national guard was formed, embracing nearly all the citizens capable of bearing arms, with Lafayette for commander, and the government of the city became a democratic municipality with Bailly for mayor. The irresolute king, whose intentions were good while his weakness led him into fatal vacillations and tergiversations, was now persuaded to dismiss Necker and banish him from the kingdom, and to surround Paris with a powerful army commanded by Marshal Broglie. Paris, exasperated at these reactionary measures, rose in insurrection and stormed the Bastille on July 14. The king was startled and dismayed, and meditated flight beyond the frontier, though he did not yet fully appreciate the dangers of his position. "It is an insurrection," he said to the duke de la Rochefoucauld-Liancourt on the night after the taking of the Bastille. "No, sire, it is a revolution." The next morning Louis, who had a horror of bloodshed, and would not use the force at his command, made his appearance in the national assembly, which he addressed for the first time by this title. He came without his guards, accompanied only by his two brothers. "Gentlemen," he said, "I am come to consult you on the most important affairs; the frightful disorders of the capital call for immediate attention. It is in these moments of alarm that the chief of the nation comes, without guards, to deliberate with his faithful deputies upon the means of restoring tranquillity. I know that the most unjust reports have been for some time in circulation as to my intentions; that even your personal freedom has been represented as being in danger. I should think my character might be a sufficient guaranty against such calumnies. As my only answer, I now come alone into the midst of you; I declare myself for ever united with the nation; and relying on the fidelity of the national assembly, I have given orders to remove the troops from Versailles and Paris; and I invite you to make my dispositions known to the capital." This speech for a while restored popular confidence in the king, though at the time of its utterance he had with his usual infirmity of purpose already signed the order for the army to advance upon Paris. On July 17, accompanied by the national assembly, the king visited Paris, and was conducted through a mob of 100,000 armed men to the Hôtel de Ville, where he showed himself to the people, wearing on his breast the popular badge, the tricolor, which had recently been adopted as the revolutionary emblem. He was then reconducted to Versailles amid the strongest demonstrations of popular attachment. On the day of the king's entry into Paris the princes of the blood, except Monsieur, and the chiefs of the aristocratical faction fled from the kingdom. They were followed by large numbers of the nobles and by the ministry, whom the assembly had impeached. At the same time Necker was recalled, conducted

to Paris in triumph, and reinstated in his office. From this period the revolution went rapidly onward. An imprudent outburst of loyal enthusiasm among the officers of the troops stationed at Versailles produced a sudden commotion in Paris, and a furious mob marched (Oct. 5) from that city to Versailles, where they took possession of the royal palace, and after committing great outrages compelled the king, queen, and royal family, who had narrowly escaped massacre, to return with them to Paris, where they were permitted to occupy the Tuileries, which was strictly guarded to prevent their escape. These events completed the first era of the revolution, in which, during the 5 months that had elapsed since the meeting of the states-general, an absolute monarchy had been converted into a turbulent democracy, the property of the church confiscated, the feudal privileges of the nobles and the immunities of great corporations abolished, the principle of universal equality recognized, all authority admitted to flow from the people, and the right of insurrection recognized as a sacred duty. Louis remained a virtual prisoner in the Tuileries till the following year. On July 14, 1790, he took part in the imposing ceremony of the confederation in the Champ de Mars, where in presence of half a million of spectators he swore to be faithful to the constitution which the national assembly was then preparing. After this, however, his situation grew constantly worse. Necker, unequal to the difficulties of his post, retired to Switzerland. Mirabeau, who had been won over, partly by bribery, to the side of the king, died, and with him fell the last hope of the monarchy. The king, to test the degree of restraint to which he was subject, endeavored in April, 1791, to pay a visit to his palace of St. Cloud, but his departure from the Tuileries was prevented by the mob. He now determined to make his escape from this disgraceful thralldom, and from the violence, insult, and danger to which he was continually exposed in Paris, and, calling around him at some place on the frontiers such subjects as were yet loyal, make a stand against the tyranny of the assembly and the mob. In concert with the marquis de Bouillé, an able and resolute general, who commanded a body of loyal troops in Lorraine, a plan was at length formed for the flight of the whole royal family to Montmédy on the northern frontier, about 200 miles from Paris. It was put in execution June 20, and failed of success chiefly through the obstinacy and want of common sense of the king himself, who could not be persuaded to make use of common carriages, but had a peculiar coach built for his own use, which attracted attention, and who beside did not on his journey take care to keep himself concealed from observation. He was recognized by the assistant postmaster Drouet at Ste. Menehould, stopped by the national guards at Varennes, 150 miles from Paris, and brought back to the capital a prisoner, accompanied by the stern Pétion, and by Barnave, who now be-

came a defender of the throne. On the morning after his return a decree of the national assembly provisionally suspended him from his functions as king, and a strict guard was placed over him and the royal family. In September the new constitution was submitted to him for acceptance, his freedom being previously restored to him. After several days' examination he sent this message to the assembly, Sept. 13: "I accept the constitution; I engage to maintain it alike against civil discord and foreign aggression, and to enforce its execution to the utmost of my power." On the following day he repaired in person to the assembly to declare his acceptance, and on Sept. 29 he attended the closing session of the assembly and delivered a speech in which he said: "Tell your constituents that the king will always be their first and best friend; that he has need of their affection; that he knows no enjoyment but in them and with them; that the hope of contributing to their happiness will sustain his courage, as the satisfaction of having done so will constitute his reward." For a brief period after this Louis had a certain degree of peace and even of popularity; but his vetoes upon the decrees against the emigrant royalists and the priests who would not swear to support the constitution, and his veto of the decree for the defence of Paris against the Austrians and Prussians, caused such irritation that on June 20, 1792, a terrible mob marched from the suburbs to the Tuileries, took possession of the palace, and seizing the king sought by menaces and insults to make him withdraw his vetoes. He refused with great dignity and firmness, and after several hours of stoical endurance he was rescued by the arrival of the mayor with the national guard. The invasion of France by the Prussians and Austrians, and the insolent manifesto of the duke of Brunswick, their commander, again roused the Parisians to fury; and on Aug. 10 they rose in insurrection, stormed the Tuileries, and massacred the Swiss guards, who had made a gallant defence. Louis with his family sought refuge in the hall of the national assembly, where they passed 16 hours in a narrow closet. The assembly, meantime, passed an act to suspend the royal authority, to place the king and his family under control, to give the dauphin a tutor, and to assemble a national convention. The Temple, an ancient fortress in Paris erected by the knights templars, was assigned as the prison for the royal family. The national convention assembled, and on Sept. 20 proclaimed France a republic. In December they brought the king to trial on various charges, the substance of which was that he had conspired with the emigrants and the foreigners to overthrow the constitution and restore the ancient order of things. These charges were supported by documents which had been found in an iron safe concealed in a wall of the Tuileries. Louis, assisted by 3 advocates, Tronchet, Desèze, and Malesherbes, was brought before the convention on Dec.

11 and 26, and made a dignified and forcible defence, but was found guilty by a unanimous vote, Jan. 15, 1793. After stormy debates between the Girondists and Jacobins, he was condemned on the 17th by a majority of 5 votes, and guillotined on the 21st.—See De Tocqueville, *Coup d'œil sur le règne de Louis XVI.* (Paris, 1850).

LOUIS XVII., dauphin and titular king of France, son of the preceding, born at Versailles, March 27, 1785, died in the Temple at Paris, June 8, 1795. He was the third child of Louis and of Marie Antoinette. His first title was duke of Normandy, and he became dauphin by the death of his elder brother Louis Joseph, June 4, 1789. He was carefully educated under the supervision of his father, and at the outbreak of the revolution was a beautiful, lively, and intelligent child, but remarkably impatient and unmanageable. He was imprisoned in the Temple with the rest of the royal family, Aug. 18, 1793. After the execution of his father, Jan. 21, 1793, he was proclaimed king by his uncle, the count of Provence, who was then a refugee in Germany, and was recognized as king by most of the courts of Europe, by the Vendean chiefs, and by the insurgents in the south of France. These demonstrations, together with several unsuccessful attempts by the royalists to rescue him from prison, irritated and alarmed the revolutionary government; and on July 3, at 10 o'clock at night, the boy was forcibly torn from his mother's arms, and, frantic with terror, was carried screaming to another part of the prison. Here he was consigned to the care of a shoemaker named Antoine Simon, a violent Jacobin of rough manners and brutal temper, who treated him with systematic cruelty, apparently with the design of getting rid of him without committing palpable murder. The young prince was shut up in a cell and left there alone day and night, without employment or amusement, or any opportunity for exercise or to breathe fresh air. A vessel of water, seldom replenished, was given him for drink, and some coarse food was occasionally thrown in at the half opened door. He was allowed no means of washing himself, his bed was not made for 6 months, and for more than a year his clothes, his shirt, and his shoes were not changed. By prolonged inactivity his limbs became rigid, and his mind, through terror, grief, and monotony, became imbecile, and at length deranged. Something that he had said in reply to questions having been perverted to the injury of his mother, he resolved thenceforth to be silent, and for a long period neither threats nor blows nor coaxings could induce him to speak. When not sleeping he sat quietly in his chair, without uttering a sound or shedding a tear, or shrinking from the rats with which his dungeon swarmed. The reign of terror at last ended, and in July, 1794, the brutal Simon perished by the guillotine, together with Robespierre, Couthon, and Saint Just. Louis was placed under the care of more merciful keepers, but he was still kept in solitary confinement, and not allowed to see

his sister, who was imprisoned in an adjoining apartment. At length, in May, 1795, a physician was allowed to see him, who pronounced him dying of scrofula. He died at 2 P. M. in the arms of Lasne, one of his keepers, and the next day, June 9, his body was identified and certified to by 4 members of the committee of public safety and by more than 20 of the officials of the Temple. A post-mortem examination was made the same day by 4 distinguished physicians. On the following day the remains were buried in the cemetery of Ste. Marguerite, and every trace of the grave carefully obliterated. Several pretenders claiming to be Louis XVII. have appeared; among them, in France, Hervagant, a tailor's son, who died in 1813 in prison, and Bruneau, a shoemaker, who was sent to prison in 1802; and in America, the Rev. Eleazar Williams, a half-breed Indian, who died in 1859.—See Beauchesne, *Louis X VII., sa vie, son agonie, sa mort* (Paris, 1852; English translation by William Hazlitt, London and New York, 1853).

LOUIS XVIII. (LOUIS STANISLAS XAVIER), king of France, born at Versailles, Nov. 17, 1755, died in Paris, Sept. 16, 1824. The 4th son of the dauphin of Louis XV. and of Maria Josepha of Saxony, he received at his birth the title of count of Provence, and on the accession of his brother Louis XVI. to the throne, that of Monsieur. He was superior to his brothers in abilities, but inferior in character, especially to the king, and during the reign of the latter spent a large part of his time in philosophical and literary studies, and in petty, often not harmless intrigues against the king, the queen, and his younger brother the count of Artois. A theoretical conservative, he opposed the liberal measures of Maurepas, the reforms of Turgot, and the financial experiments of Necker, but afterward took an important part in the acts of the assembly of notables, contributed to the fall of Calonne, sided with the parliaments, and thus gained much popularity. On the outbreak of the revolution he lived in comparative retirement, and was unobserved during the tumults of Oct. 5 and 6, 1789, but in the following year was accused of complicity in the alleged conspiracy of the marquis of Favras against the revolution. He made a public defence and was acquitted with acclamations, while Favras suffered the punishment of death without naming any of his associates. In June, 1791, Monsieur finally fled from the capital, and succeeded in escaping beyond the frontier. The court being now kept under surveillance by the people, he took up his abode in Coblenz on the Rhine, declared his brother to be a captive, and, gathering around him the so called *France extérieure*, formed a kind of camp court, protesting against the revolutionary measures of the French national assembly. The unhappy issue of the first campaign against France, however, soon compelled him to quit the vicinity of that country. Having assumed the title of regent for Louis XVII. after the execution of Louis XVI., he lived successively at various places

in Germany and England, and at Verona, whence he was driven again by the victories of General Bonaparte. An attempt was made upon his life at Dillingen, after which he repaired to Mitau in Courland, which he soon had to leave at the command of the czar Paul. He then lived in Warsaw till the treaty of Tilsit, and finally in England till the fall of Napoleon in 1814. Suffering under a complication of painful diseases, he now returned in triumph to his native country, after an absence of 23 years, to occupy the throne of his ancestors. Infirm and old, and surrounded by an ultraroyalist party desirous of revenge on their popular enemies, it soon became apparent that he possessed neither the sympathy of the people nor the fidelity of the remnants of the Napoleonic army; and scarcely had the captive of Elba appeared on the coast of southern France, when Louis saw himself deserted and again driven into exile. But the Hundred Days were soon over, and the battle of Waterloo again replaced him upon his throne, which was now to be guarded by an army of foreigners. France was humiliated by the treaty of Vienna, exhausted, and utterly demoralized; the strifes of factions, ultra royalists and ultra liberals, broke out with unbridled fury, assuming in some parts of France the shape of bloody popular commotions and in others that of religious fanaticism; the finances of the kingdom were in a deplorable condition, while the requisitions of the restored old victims of the revolution knew no bounds. The king granted a charter, but almost every important part was gradually altered, his anxiety to heal the wounds of the distracted state being far superior to his ability to do it. There was as little harmony at the court and among the various ministries as there was in the chamber, in which Châteaubriand (1820) and Benjamin Constant became the most eminent leaders of the opposite parties. A better order and better feeling prevailed after the congress of Aix la Chapelle (1818), which reinstated France in its dignity as a great power, and the evacuation of its territory by the army of occupation. Some conspiracies were easily suppressed; the assassination of the duke of Berry by Louvel (1820) remained without effect, as the duchess of Berry was soon delivered of an heir to the throne, the duke of Bordeaux; and even the intervention of a French army under the duke of Angoulême, the king's nephew, for the restoration of Ferdinand VII. in Spain, could not entirely deprive Louis of the esteem and affection of the people. On his death the count of Artois succeeded to the throne under the name of Charles X.

LOUIS I. (LUDWIG KARL AUGUST), ex-king of Bavaria, born Aug. 25, 1786, succeeded to the throne Oct. 13, 1825, after the death of his father, King Maximilian Joseph. He distinguished himself particularly by his generous and enlightened patronage of letters and art, removed the university of Landshut, which, as well as that of Göttingen, he had himself attend-

ed, to Munich, reorganized the academy of fine arts, and immortalized himself by the construction of the Odeon, Basilica, Pinakothek, Walhalla, and other public works and monuments, destined to be repositories for works of art, or to diffuse a love of art. In the sphere of learning, he encouraged more especially historical studies, and his taste for poetry is attested by his own publications, *Gedichte* (1829) and *Walhalla's Genossen* (1848). In the early part of his administration he showed a leaning toward a popular policy; but the ultramontane party predominated in his councils from 1831 until 1847, when general hostility to its influence led to its downfall, without diminishing, however, the public excitement, which was increased by the supposed influence of Lola Montez over the mind of the king. In Feb. 1848, disturbances broke out in Munich, after which Lola fled, and a short time afterward the king himself went into retirement (March 20), resigning in favor of his son Maximilian. By his marriage in 1810 with the princess Therese of Saxe-Hildburghausen, (who died in 1854), he had 8 children: 1, the present king Maximilian II.; 2, King Otho of Greece; 3, Prince Luitpold, married to Augusta of Tuscany; 4, Prince Adalbert, married in 1856 to the infanta Amalia of Spain; 5, Mathilde, married to the grand duke Louis III. of Hesse-Darmstadt; 6, Adelgunde, the wife of the grand duke of Modena; 7, Hildegard, the wife of Archduke Albrecht of Austria; and 8, Alexandra, still unmarried.

LOUIS IV., THE BAVARIAN, emperor of Germany, born in 1286, died near Fürstentfels, in the neighborhood of Munich, Oct. 11, 1347. He was the son of Louis the Severe, duke of Bavaria, and of Matilda, daughter of the emperor Rudolph I. of Hapsburg, and after the death of his father, having been for some years under the tutelage of his mother, became co-regent with his elder brother Rudolph in their hereditary possessions. On the sudden death of the emperor Henry VII. of Luxemburg in Italy (1318), he was chosen as his successor by the majority of the electors, while his late friend Frederic the Fair of Austria, like himself a grandson of Rudolph of Hapsburg, and son of the emperor Albert I., was proclaimed emperor by the minority, under the name of Frederic III. (1314). A long war between the two rivals ensued, which, after the devastation of a large part of Germany, was terminated by the battle of Mühldorf (Sept. 28, 1328), which made Frederic the captive of Louis. Treated humanely at the castle of Trausnitz, Frederic was released from captivity in 1325, on condition that he would return if he should prove unable to persuade his adherents to acknowledge the imperial title of the victor. Not succeeding in this object, Frederic kept his promise, and Louis not only renewed his early friendship with him, but also made him governor of his hereditary possessions in Bavaria. He had in the meanwhile increased the hostility and excommunication of Pope John

XXII., by supporting against him the Viscontis in Lombardy. In 1827 he started for Italy, and was crowned in Milan and Rome, though at the latter place not by the pope, against whom he now elevated Nicholas V. to the papal dignity. But this arbitrary step caused a general movement against the emperor in Italy, which compelled him speedily to retire from Rome. John XXII. not only maintained himself, but he, as well as his successors, continually endangered the position of the emperor by raising up foreign enemies and rivals in Germany. Of the latter, Charles of Bohemia was elected emperor in 1346. Louis, however, having strengthened his power in Germany by patronage bestowed on his son Louis, as well as by the inheritance of Holland, Zealand, Friesland, and other possessions through his wife Margaret of Holland, was enabled in 1347 to prepare for another expedition to Italy, when he suddenly died while hunting, of apoplexy, or, as some believed, of poison. Charles succeeded him as the 4th of that name.

LOUIS, PIERRE CHARLES ALEXANDRE, a French physician, born in AI, department of Marne, in 1787. He received his degree of M.D. at Paris in 1813, and subsequently entered the *hôpital de la charité* in that city, where he studied diagnosis and pathological anatomy. His first works, *Recherches anatomico-pathologiques sur la phthisie* (8vo., Paris, 1825), and *Recherches sur la membrane muqueuse de l'estomac*, &c. (1826), procured him admission to the academy of medicine. His reputation meanwhile rapidly increased, and his position as a pathologist was one of the most eminent in Paris. In 1828 he was a member of the medical commission sent to Gibraltar to examine into the causes and cure of yellow fever, and concurred in the report on the disease published in 1832. Since 1854 he has retired from practice, with the reputation of one of the first physicians in his peculiar department in Europe. Among his remaining works are: *Recherches sur la fièvre typhoïde* (2 vols. 8vo., 1828); *Recherches sur les effets de la saignée dans quelques maladies inflammatoires* (8vo., 1835); a variety of memoirs and papers on medical subjects, &c.

LOUIS D'OR, a French gold coin, first struck under Louis XIII. in 1641. It has fluctuated in value, but subsequent to 1785 was coined at the rate of 82 to the mark of gold 22 carats fine, having an intrinsic value of about 20s. sterling (\$4.84). No coins of this name are now struck, although the term is still applied to the 20 franc gold pieces of the French mint.

LOUIS NAPOLEON. See BONAPARTE, vol. iii. p. 471.

LOUIS PHILIPPE, king of the French from 1830 to 1848, born in the Palais Royal, Paris, Oct. 6, 1773, died in exile in Claremont, near London, Aug. 26, 1850. He was the son of Philippe Égalité, duke of Orleans, and of Louise de Bourbon Penthièvre. On his father's side he was descended from a brother of Louis XIV.; on his mother's from the count

of Toulouze, a natural but legitimized offspring of that monarch and Mme. de Montespan. His godfather was Louis XVI.; his godmother, Marie Antoinette. His earliest preceptor was M. de Bonnard. In 1781 he was placed under the care of Mme. de Genlis, whose opinions in regard to education were modelled after those of Jean Jacques Rousseau. She taught her pupil to cherish habits of hardihood and enlarged views of humanity, which manifested themselves throughout his life in a remarkable capacity of patient and cheerful endurance, and in a general equanimity and kindness of disposition; in addition to which he was amply qualified by a naturally philosophical and well balanced mind, which was conspicuous even at that early age, to become a calm and shrewd observer of men and things. In 1785, when his father became duke of Orleans, he exchanged his original title of duke of Valois for that of duke of Chartres, with the rank of a colonel in the army. Following his father's example, and notwithstanding his mother's opposition, he was carried away by the enthusiasm of the revolution of 1789, and gave his solemn allegiance to its principles (Feb. 9, 1790), took an active part in the Jacobin club, acquired popularity by his conduct on several occasions, was appointed commandant of Valenciennes (Aug. 4, 1791) and lieutenant-general (Sept. 11, 1792), and displayed much courage in several engagements, particularly at the battle of Valmy under Kellermann (Sept. 20) and at Jemmapes (Nov. 6) under Dumouriez. A temporary visit to England having brought his sister and Mme. de Genlis under the category of *émigrées*, they were banished from Paris; and Louis Philippe left his post to escort them to a safe retreat in Belgium, but soon returned to aid in the bombardment of Venloo and Maestricht, and to take a brilliant share in the battle of Neerwinden (March 18, 1793). Dumouriez having incurred the suspicion of the convention, Louis Philippe shared his flight to Mons, and afterward retired with his sister and Mme. de Genlis to Switzerland. The feeling in the convention against the royal princes became in the mean time greatly exasperated. Louis Philippe was considered as an accomplice in the alleged conspiracies of Dumouriez; Marat proposed to offer a reward for his head; and his father and the other members of his family were arrested. These circumstances aggravated the difficulties of Louis Philippe's wanderings. He spent only a short time at Schaffhausen, and soon left Zürich and Zug for a refuge of greater safety, which was vouchsafed to him by a brother exile, Gen. Montesquieu, at Bremgarten in the canton of Aargau. Leaving the two ladies at the convent of St. Clara, he proceeded on foot over the Alps, accompanied by his devoted servant Bandoir, at times short of money, shelter being denied to him by the monks of St. Gotthard and in several other localities. Subsequently Montesquieu procured employment for him in a boarding school of Reichenau, Gri-

sons, where he gave lessons in mathematics and geography under the name of Chabaud-Latour for several months, until Nov. 1794, when the fatal news of his father's execution reached him. He then returned to Bremgarten under the assumed name of Corby; but fearing to involve his friend in difficulties, he left Switzerland for Hamburg in March, 1795, where he happened to meet Dumouriez, and from which place he intended to proceed to the United States, Mme. de Flahault having secured for him the good will of Gouverneur Morris, then American minister in France. Unable to sail before 1796, he employed the interval in exploring Denmark, Sweden, Norway, Lapland as far as lat. 72° N., and Finland, returning to Hamburg in Jan. 1796. On Sept. 24 he took passage on the ship *America* as a Danish subject, and landed in Philadelphia, Oct. 21, 1796. In company with the duke de Montpensier and the count de Beaujolais, who after the recovery of their liberty had lost no time in joining their elder brother, Louis Philippe now made the tour of the United States. The three brothers proposed to go to Spain, where their mother lived in exile, but were detained at Havana by order of the court of Madrid, and eventually compelled to return to the United States. They sailed from New York for England, arriving there in Jan. 1800; and after several fruitless attempts to visit Spain, they took up their abode in Twickenham, near London, only occasionally leaving their modest retreat to make excursions in the interior of England and of Scotland, Louis Philippe's fondness for travelling and eagerness for knowledge remaining unabated. His two brothers, faithful companions in his misfortunes, both died of consumption; the duke de Montpensier in Jan. 1807, and the count de Beaujolais in June, 1808, the latter while on his way to Malta. Louis Philippe now repaired to Messina, and next to the court of Ferdinand IV. at Palermo. He there made the acquaintance of Ferdinand's accomplished and pious daughter, Marie Amélie; but being induced to accompany her brother to aid the Spanish Bourbons against King Joseph Bonaparte, he was stopped at Gibraltar by order of the British government and brought to England, where however he received the long coveted permission to visit his mother in Spain. Joined at Portsmouth, after 14 years' absence, by his sister Adelaide, they had at length the satisfaction of beholding once again their venerable mother, who had been living first at Barcelona and afterward at Figueras since 1797. Louis Philippe now proceeded in company with his mother and sister to Palermo, where his marriage with Marie Amélie took place in the royal chapel, Nov. 25, 1809. In the spring of 1810 he again endeavored to use his influence in behalf of the Spanish Bourbons; but, once more thwarted by English diplomacy, he returned to Palermo, where his first child (afterward duke of Or-

leans) had been born during his absence (Sept. 8, 1810). His reconciliation with the elder branch of the Bourbon family having been effected in 1799, very much through their common hatred of Napoleon, the fall of the emperor permitted Louis Philippe to return to France in April, 1814, after an exile of 21 years. He soon brought his family to Paris. His rank in the army, the estates of his father and his own, were all restored to him, while the considerable property of the duke of Penthièvre was restored to his mother. Louis XVIII., however, dreaded the influence of Louis Philippe, who, as the emperor Alexander I. once remarked in the saloon of Mme. de Staël, was the only Bourbon prince of a liberal turn of mind. On Napoleon's return from Elba, Louis Philippe went to Lyons to coöperate with the count of Artois, and was subsequently commander-in-chief in the N. departments until March 24, when he retired to England. After the battle of Waterloo he returned to Paris, and remained there until Oct. 13, 1815, when his protest against the reactionary policy of Louis XVIII. became once more the signal for his retreat to Twickenham. In Feb. 1817, he at length obtained permission to return to France, but the title of royal highness was not accorded to him until the accession of Charles X. in 1824. With the latter he was personally on friendly terms, but vainly urged him to liberalize his policy. Louis Philippe looked upon the support of the middle classes or *bourgeoisie* as the only substantial guaranty for safety between the extremes of republicanism and absolutism. At the same time his generous hospitality to politicians, men of letters, and artists, contrasted favorably with the rigid exclusiveness of the court of Charles X. The charms of his conversation fascinated all who came in contact with him, and he won public favor by the amenity of his manners and by the virtues of his domestic life. Indeed, in his devotion to his wife and children and in the thrifty management of his vast estates, he displayed those qualities which are most highly valued and best understood by the middle classes, while with all his pride of birth he had little or nothing of the haughtiness which they abhor in princes and nobles. During the revolution of July, 1830, his name occurred to Lafitte, Béranger, and other leaders of the movement, as the only one which could rally the nation in support of constitutional monarchy; and after some hesitation Louis Philippe accepted the title of lieutenant-general of the kingdom, his public reception at the Hôtel de Ville taking place on July 31, where together with Lafayette he appeared at the window with a tricolor flag, and the general embraced the duke. A provisional public administration was formed, including Dupont (de l'Eure), Gen. Gérard, Baron Louis, and Guizot, the last two names being much commented upon on account of their associations with the old dynasty. At the sitting of the chambers on Aug. 7 the con-

stitution was modified, the forfeiture of the old dynasty pronounced, and a new one instituted, 219 out of 252 votes electing Louis Philippe as king of the French. The peers approved the action of the deputies, notwithstanding the eloquent remonstrances of Châteaubriand. The solemn transfer of the crown took place on Aug. 9 in the Palais Bourbon, at a royal *séance* of both chambers, when Louis Philippe made his entry to the sound of the *Marseillaise* and the noise of cannon fired at the Invalides, accepting the crown, and, amid cries of *Vive le roi*, swearing faithfully to observe the modified charter. One of the first acts of Louis Philippe was the nomination (Sept. 4, 1830) of Talleyrand as ambassador to London, which bound French diplomacy to the maintenance of the treaties of 1815 and the renunciation of the Russian alliance, and laid the foundation for that between France and England. The first 6 years of his reign were spent in combating the legitimist, Bonapartist, and republican parties. The trial of the ex-ministers of Charles X. gave rise to serious disturbances, in appeasing which Lafayette compromised his popularity and forfeited his commandship of the national guard, to the great relief of Louis Philippe, who feared the influence of the man who had ushered him into power. Guizot, De Broglie, and their friends, the so called *doctrinaires*, were dismissed, and Laffitte placed at the head of the administration (Nov. 2, 1830). Universal suffrage was rejected, but a new electoral law was passed, which became the basis of what Guizot called the middle class tory party. The leader of this party, Casimir Périer, succeeded Laffitte, March 18, 1831, and remained prime minister until his death in May, 1832. An exciting discussion was opened in the chambers about a programme which Louis Philippe is alleged to have shown to Lafayette in 1830, and containing terms of government far more liberal than those of his actual administration. Poland was left to her fate, and after the occupation of the Polish capital by the Russians, the announcement that "order reigns in Warsaw" was made in the chamber by Count Sebastiani. Paris became the scene of an insurrection during the funeral of Gen. Lamarque (June, 1832). This having been put down by force of arms, a new administration was formed by Soult, Oct. 11, 1832, including De Broglie, Guizot, and Thiers, and which, with some modifications, continued in power until Feb. 22, 1836. It remained on the whole faithful to the *juste milieu* policy of Louis Philippe in home affairs, in steering between the extremes of parties, and to his *paix à tout prix* policy in foreign affairs. The Belgian revolution was settled by the choice as king of Leopold of Saxe-Coburg, whose relation with Louis Philippe became still more intimate by his marriage with his daughter, the princess Louise; and a French army under Gérard crossed the Belgian frontier and after an obstinate siege conquered the citadel of Antwerp for Leopold (Dec. 1832). In Italy the

influence of Austria was counterbalanced by the occupation of Ancona (Feb. 1832). A quadruple alliance between France, England, Spain, and Portugal was signed in 1834. Public order was especially threatened by the criers or vendors of inflammatory publications, and a law making a license requisite for the exercise of that calling was passed, but not without causing disturbances. A new system of primary education was introduced, savings banks were established, and other kindred measures passed; but the revolutionary spirit, although curbed, was not crushed, and Louis Philippe's situation was surrounded with great perils, as attested by the bloody insurrections at Lyons (1831 and 1834), Grenoble, and Paris (1834), republican conspiracies by the elder Cavaignac, Marrast, and others, the attempted insurrection in the west of the kingdom by the duchess of Berry (1832), who was punished by imprisonment in the fortress of Blaye, and especially by the numerous attempts upon the king's life, the most formidable of which was that of Fieschi, July 28, 1835. This man, who was born in Corsica in 1790, had been a soldier, but afterward led the life of a spy and vagabond, and was connected with various political conspiracies. In concert with Morey and Pépin he exploded an infernal machine with 22 gun barrels, and containing numberless projectiles, from a house in the boulevard du Temple at the king, while the latter was engaged in holding a military review. The king barely escaped with his life, and Marshal Mortier and a number of persons near him were killed on the spot. Fieschi and his accomplices were executed, Feb. 16, 1836. An attempted military insurrection at Strasbourg in favor of Louis Napoleon, as a pretender to the throne, was easily suppressed. From without Louis Philippe was met by the distrust of the foreign powers, especially of Russia, concerning the stability of his government. From 1836 to the end of 1840 the history of his reign is that of contests between him and the chambers, and of rivalries between Thiers, Guizot, Molé, and Soult, who were successively at the head of the administration. Thiers withdrew on account of the opposition of the king and of the chambers to his views about intervention in the affairs of Spain and of other countries, and the defeat of the Guizot-Molé cabinet was hastened by the opposition to Louis Philippe's demands for the aggrandizement of his family. Under the Molé administration, a general amnesty was granted on occasion of the marriage of the duke of Orleans with Helena of Mecklenburg (May 30, 1837); and the foundation of the national museum of Versailles, which was inaugurated June 10, was one of the great achievements of Louis Philippe's reign. A coalition of Guizot, Thiers, Odilon Barrot, Berryer, and Garnier-Pages led to the downfall of Molé and to a ministerial crisis, which ended in placing power in the hands of Soult, who was in his turn supplanted by Thiers (March 1, 1840). During his administration the second

attempt of Louis Napoleon to excite an insurrection in his own behalf took place at Boulogne, in consequence of which that prince was imprisoned in the fortress of Ham. Strikes and riots among the working classes were rife at the time, and new names were added to the list of fanatics or maniacs who conspired against the life of Louis Philippe. But the principal difficulties of Thiers's administration were in connection with the conflict between the viceroy of Egypt and the sultan. Thiers wished France to interfere in favor of the former, and really commenced extraordinary armaments; but finding himself once more at variance with the peace policy of Louis Philippe, a new administration under Soult and Guizot was formed (Oct. 29, 1840). Henceforth, until the revolution of 1848, Soult remained in power, but few modifications taking place in his cabinet, of which Guizot was the master spirit, and Duchâtel and Villemain eminent members. Conspicuous among the measures of the administration was the fortification of Paris, which had been proposed by Thiers, and the law of 1842 for the establishment of the great railway lines. In 1840 (Dec. 15) the body of Napoleon I. was brought to Paris by the prince de Joinville, and interred in the Invalides. The peace at home was on the whole not materially broken, while the war in Algeria was carried on with continued energy, leading also to a short war with Morocco (1844); but domestic afflictions overtook Louis Philippe, who had already been plunged in sorrow in 1839 by the death of his accomplished daughter Marie, and who was still more severely tried in 1842 by the loss of the duke of Orleans, whose life might have possibly averted the revolution of 1848, and whose death was justly considered as a national calamity. In foreign affairs the long cherished *entente cordiale* with England reached its climax in 1843-'5, when visits were exchanged between the queen of England and Louis Philippe; but it was shaken by the Pritchard indemnity question, and seriously broken by the Spanish marriages, in which Louis Philippe is said to have taken a selfish and sinister part. The great glory of his reign, however, was the conquest of Abd el Kader, the colonization of Algiers, and the formation of an army and a school of generals who have since added new lustre to the arms of France. Compared with the convulsions in the earlier part of his reign, the Soult-Guizot administration was marked by calm and prosperity. In 1847, however, the shortness of the crops entailed much suffering upon the people. Scarcity caused disturbances, and bread riots broke out in various parts of the country. Banquets for the discussion of political reforms were proposed. One announced to be held Feb. 22, 1848, was opposed by the government, but Odilon Barrot, Ledru-Rollin, and other popular leaders insisted upon its taking place. Louis Philippe, unconscious of the coming storm, was reluctant to see it suppressed by force of arms, and at length

(Feb. 28), when it became necessary for the government to call the national guard to its assistance, that body answered with shouts of *Vive la réforme*. Numberless barricades sprang up in almost every quarter of Paris; the king's abdication in favor of his grandson came too late, his throne was burned on the Place de la Concorde, and the chamber of deputies finally sanctioned the overthrow of the monarchy (Feb. 24). On the morning of Feb. 25, when the old monarch with some members of his family had already fled from the capital, he was apprised of the proclamation of the republic. With great difficulty he succeeded in crossing the Seine with his wife from Honfleur to Havre under the name of Smith. From thence he was carried by a steamer sent for his use by the English government, and arrived on March 4 at Claremont, the palace of the king of the Belgians, near London, where he spent the rest of his life.

LOUISA. I. A central co. of Va., bounded N. by the North Anna river, and drained by the South Anna and Little rivers; area, 570 sq. m.; pop. in 1850, 16,691, of whom 9,864 were slaves. The surface is hilly, and the soil somewhat exhausted. It contains gold mines, which have, however, not been found profitable. The productions in 1850 were 199,521 bushels of wheat, 877,288 of Indian corn, 1,584,285 lbs. of tobacco, and 23,427 of wool. There were 26 churches, and 452 pupils attending public schools. Value of real estate in 1856, \$3,450,886; increase since 1850, 31 per cent. Capital, Louisa Court House. II. A S. E. co. of Iowa, bordered on the E. by the Mississippi, and intersected by the Iowa river; area, 542 sq. m.; pop. in 1859, 10,805. The soil is very fertile, especially on the borders of the streams. The productions in 1859 were 67,186 bushels of wheat, 3,210 of oats, 588,624 of Indian corn, 18,036 of potatoes, and 9,371 tons of hay. Capital, Wapello.

LOUISA (LUISE AUGUSTE WILHELMINE AMALIE), queen of Prussia, born in Hanover, March 10, 1776, died at the palace of Hohenzieritz, near Strelitz, July 19, 1810. She was the daughter of Duke Charles of Mecklenburg-Strelitz. After the death of her mother in 1782, she was placed under the care of her grandmother the landgravine of Hesse-Darmstadt, and received an excellent private education. She was married, Dec. 24, 1793, to the crown prince of Prussia, who succeeded to the throne in 1797 as Frederic William III. During the campaign of 1806 she accompanied him to Thuringia, and after the battle of Jena to Königsberg. After the fatal battle of Friedland in 1807 she visited Napoleon at Tilsit, with a view of obtaining for Prussia favorable conditions of peace; but not succeeding in her negotiation, she rejoined her husband at Memel, and in 1808 returned with him to Königsberg, from whence she proceeded at the end of the year to St. Petersburg. She went to Berlin in 1809, and died the next year while on a visit to her father at Strelitz. Carlyle in his "Fred-

eric the Great" refers to her as "the famous Queen Louisa of Prussia, beautiful to look upon, and who showed herself a heroine in Napoleon's times." She was greatly beloved by the Prussian people.

LOUISBURG, a town of the British colony of Cape Breton, situated on the S. E. side of the island, in lat. 45° 54' N., long. 59° 52' W. Its present population consists of only a few fishermen. After the surrender of the French settlements in Nova Scotia to England by the peace of Utrecht in 1713, emigrants from those settlements occupied the coasts of the neighboring island of Cape Breton, and Louisburg, so named in honor of Louis XIV., began to be fortified by the French government on a gigantic scale with the intention of making it the strongest fortress in America, and a commanding naval, fishing, and commercial station. The town was about 2½ m. in circumference, and stood upon a neck on the S. side of the harbor, a beautiful and extensive land-locked basin with an entrance half a mile broad. It was fortified by a wall from 80 to 86 feet high, with a ditch 80 feet broad. The main works mounted 65 heavy cannon and 16 mortars. On Goat island at the entrance of the harbor was a battery of 80 guns, and at the bottom of the harbor opposite the entrance was another called the royal battery, which mounted also 80 guns. A lighthouse visible 15 miles at sea stood on a high cliff opposite the island battery. The town was laid out in regular squares, with broad streets, and houses built mostly of wood, but many of stone. The fortifications had been nearly 80 years in building, and had cost the French government upward of \$5,000,000. The neighborhood of Louisburg caused great uneasiness in New England, whose important interest in the fisheries was threatened with entire ruin by the privateers who found refuge in its spacious harbor. In 1745, Great Britain being at war with France, Gov. Shirley of Massachusetts devised a plan for taking Louisburg, which was adopted by the legislature of that province in secret session by a majority of one vote. Forces were promptly raised, and William Pepperell, a merchant of Kittery, was appointed commander. Connecticut sent 516 men, New Hampshire 304, and Massachusetts 8,250. Embarked in 100 New England vessels, and supported by a British squadron under Commodore Warren, they landed near Louisburg on April 30. The place was defended by a garrison of 1,600 men commanded by Duchambon. A detachment stationed in the royal battery on the shore of the harbor was struck with panic at the approach of the New Hampshire troops led by William Vaughan, and spiked their guns and abandoned their post in the night. Vaughan took possession of it next morning, and beat off the French who attempted to recover it. Major Seth Pomroy, a gunsmith from Northampton, with 20 other smiths, succeeded in drilling out the cannon, and fire was soon opened on the city. The siege, though prosecuted with energy and

vigilance, was conducted in the most irregular and unscientific manner. "The troops," says Bancroft, "made a jest of technical military terms; they laughed at proposals for zigzags and epaulements. . . . The men knew little of strict discipline; they had no fixed encampment; destitute of tents to keep off the fogs and dews, their lodgings were turf and brush houses; their bed was the earth—dangerous resting place for those of the people unacquainted with lying in the woods. . . . All day long, the men, if not on duty, were busy with amusements—firing at marks, fishing, fowling, wrestling, racing, or running after balls shot from the enemy's guns." At length, on May 18, a large French ship of war laden with military stores for the supply of the garrison, and with a body of troops on board, was intercepted and taken by the English fleet. Disheartened by this disaster, and alarmed by the erection of a battery on the lighthouse cliff which commanded Goat island, the French commandant Duchambon capitulated on June 17, the 49th day of the siege. This achievement called forth great rejoicings in New England and in New York and Philadelphia, and its influence was felt 80 years later at the beginning of the revolutionary war. Col. Gridley, who planned Pepperell's batteries, laid out the American intrenchments at Bunker hill; the same old drums that beat on the triumphal entrance of the New Englanders into Louisburg, June 17, 1745, beat at Bunker hill, June 17, 1775; and when Gen. Gage was erecting breastworks on Boston neck, "the provincial troops sneeringly remarked that his mud walls were nothing compared with the stone walls of old Louisburg." In England, the news was received with bonfires and illuminations in London and other cities; and such was the impression made by the exploit, that it was considered an equivalent for all the successes of the French upon the continent, and the first lord of the admiralty declared that "if France were master of Portsmouth he would hang the man who should give Cape Breton in exchange." Nevertheless, by the peace of Aix la Chapelle in 1748, Louisburg was restored to France. In 1757, during the 7 years' war, the earl of London, British commander-in-chief in North America, collected at Halifax a force of 6,000 regulars, 4,000 provincial troops from New England, and large numbers from New York and New Jersey, for an attack on the fortress; but on learning that the garrison consisted of 6,000 regular soldiers, and that 17 French line-of-battle ships were moored in the harbor, he abandoned the project. A second expedition under Gen. Amherst, consisting of 14,000 men and a fleet of 20 ships of the line and 18 frigates, sailed from Halifax, May 28, 1758, against Louisburg, which was defended by the chevalier de Drucourt with 3,100 men. The harbor being secured against attack by a fleet of 8 ships, and the entrance blocked by 8 sunken frigates, a landing was effected at the creek of Cormoran, June 8, and Gen. Wolfe, who afterward

took Quebec, advanced with 2,000 men against a detached post, which was abandoned at his approach. Strong batteries were erected here, and also on the opposite side of the town, and a heavy cannonade directed against the town and the shipping in the harbor. Three of the large men-of-war were at length set on fire by bombs, and two others captured by boats. Breaches were made in the walls, and after a gallant defence the garrison surrendered, July 26, and, together with sailors and marines, amounting collectively to 5,687 men, were carried prisoners to England. The town was almost a heap of ruins. The inhabitants were transported to France in English ships, and the fortifications were soon after demolished by the British government.

LOUISIANA, one of the gulf states of the American Union, and the 4th among the new states admitted under the federal constitution, lying between lat. 28° 50' and 38° N., and long. 88° 40' and 94° 10' W.; extreme length E. and W. 290 m., extreme width N. and S. 200 m.; area, 41,255 sq. m., or 26,403,200 acres. It is bounded N. by Arkansas (on the 33d parallel) and Mississippi (on the 31st parallel); E. by Mississippi, from which above lat. 31° it is separated by the Mississippi river, and below lat. 31° by Pearl river; S. by the gulf of Mexico; and W. by Texas, from which through the southern two thirds of the line it is separated by the Sabine river and bay. Louisiana is divided into 48 parishes (corresponding to the counties of other states), viz.: Ascension, Assumption, Avoyelles, Baton Rouge East, Baton Rouge West, Bienville, Bosier, Caddo, Calcasieu, Caldwell, Carroll, Catahoula, Claiborne, Concordia, De Soto, Feliciana East, Feliciana West, Franklin, Iberville, Jackson, Jefferson, Lafayette, Lafourche, Livingston, Madison, Morehouse, Natchitoches, Orleans, Ouachita (Washita), Plaquemine, Pointe Coupée, Rapides, Sabine, St. Bernard, St. Charles, St. Helena, St. James, St. John Baptist, St. Landry, St. Martin, St. Mary, St. Tammany, Tensas, Terrebonne, Union, Vermilion, Washington, Winn.—New Orleans, the chief city of Louisiana and the commercial depot of the great central valley of the United States, is situated on the E. bank of the Mississippi, 105 m. from the sea. Baton Rouge, 130 m. above New Orleans, is the political capital. The other more important towns are Alexandria, on the Red river; Algiers and Gretna, opposite New Orleans; Bayou Sara and St. Francisville, on the bayou Sara; Carrollton, 7 m. above New Orleans; Donaldsonville, on the Mississippi, formerly the capital; Franklin, on the bayou Teche; Harrisonburg and Monroe, on the Washita river; Lakeport, on Lake Pontchartrain, behind New Orleans; Madisonville, on the N. shore of the same lake; Natchitoches, on the Red river; New Iberia, on the bayou Teche; Plaquemine, on the Mississippi; Pointe Coupée, on the Mississippi opposite Bayou Sara; Proctorsville, on the S. shore of Lake Borgne; St. Martinsville, on Bayou Teche; Vermilion-

ville, near Vermilion river; Shreveport, on the Red river below the "great raft;" and Thibodeauxville, on the bayou Lafourche.—The population of the state in 1810 and at subsequent decennial periods, and in 1855, was as follows:

U. S. census.	White.	Free colored.	Slaves.	Total.
1810.....	84,811	7,385	84,660	74,856
1820.....	78,888	10,476	66,064	155,407
1830.....	89,441	16,710	109,568	215,720
1840.....	158,457	25,502	168,459	352,411
1850.....	255,491	17,463	244,809	517,763
State census.				
1855.....	301,764	22,548	263,167	567,774

Of the population in 1850, 274,596 were males and 243,166 females, viz.: whites—males 141,243, and females 114,248; free colored (3,379 blacks and 14,083 mulattoes)—males 7,479, and females 9,983; slaves (224,974 blacks and 19,835 mulattoes)—males 125,874, and females 118,935. Dwellings, 49,101; families, 54,112. Density of population, 12.55 to the square mile; proportion to that of the whole Union, 2.28 per cent. Of the total population in 1850, 12,233 were under 1 year of age; 1 and under 5, 61,202; 5 and under 10, 65,458; 10 and under 15, 57,328; 15 and under 20, 47,770; 20 and under 30, 108,224; 30 and under 40, 83,544; 40 and under 50, 46,251; 50 and under 60, 21,168; 60 and under 70, 9,745; 70 and under 80, 3,145; 80 and under 90, 941 (slaves 544); 90 and under 100, 255 (slaves 140); 100 and upward, 176 (slaves 123); unknown, 328. Of the free population, 145,474 were born in Louisiana, 60,447 in other states, and 66,418 in foreign countries. Of those born in other states, Mississippi contributed 10,913, Alabama 7,346, Georgia 5,917, New York 5,510, South Carolina 4,588, Tennessee 3,352, Virginia 3,216, North Carolina 2,923, Kentucky 2,968, and Pennsylvania 2,493; in foreign countries, Germany 17,887, France 11,452, Great Britain 4,794, Ireland 24,266, and Spain 1,417. Deaf and dumb, 117 (white 82, free colored 3, slaves 32); blind, 214 (white 72, free colored 20, slaves 122); insane, 200 (white 144, free colored 11, slaves 45); idiotic, 174 (white 106, free colored 6, slaves 62). The number of slaveholders was 20,670, viz.: holding 1 slave, 4,797; 1 and under 5, 6,072; 5 and under 10, 4,327; 10 and under 20, 2,652; 20 and under 50, 1,774; 50 and under 100, 728; 100 and under 200, 374; from 200 to 300, 36; from 300 to 500, 6; from 500 to 1,000, 4. Of 77,178 white and free colored males over 15 years of age in 1850, 82,879 were employed in commerce, trade, manufactures, mechanic arts, and mining; 18,639 in agriculture; 15,264 in labor not agricultural; 45 in the army; 4,263 in sea and river navigation; 1,827 in law, medicine, and divinity; 2,444 in other pursuits requiring education; 811 in government civil service; 508 in domestic service; and 488 in other occupations. The number employed in manufacturing establishments producing more than \$500 per annum was 6,487. The federal population in 1850 was 419,886, and entitled Louisiana to 4 representa-

tives in congress.—Louisiana has a coast line of 1,256 m. on the gulf of Mexico. This includes the many irregular bays and other indentations, but not the islands belonging to the state, which have an aggregate coast line of 994 m. Toward the S. E. extremity of the state lies Lake Borgne, which is properly a bay, communicating by two channels with Lake Pontchartrain. Black bay is situated to the S. of Lake Borgne; Bay Ronde and West bay lie on either hand of the delta of the Mississippi; and on the S. coast are Barataria, Timbalier, Caillon, Atchafalaya, Côte-Blanche, and Vermillion bays. Although the entire coast except in the S. W. part is exceedingly irregular, there are not many good harbors. The Chandeleur islands, which lie opposite the peninsula of St. Bernard parish, between Lake Borgne and Black bay, form a good roadstead. Beside numerous ponds and lagoons among the salt marshes which line the S. shores, there are some considerable lakes, most of which are expansions of the rivers. Of these, Caddo and Bistineau in the N. W., Catahoula in the centre, Chetimaches in the S., and Maurepas and Pontchartrain in the S. E., are the largest. The last two are expansions of the Amite river.—Louisiana is abundantly supplied with large rivers. The Mississippi forms the N. half of its E. boundary, and then entering the state crosses it in a S. E. direction to the gulf of Mexico, its mouth forming a delta. About 800 m. of its course belongs wholly or in part to Louisiana. Its W. bank is flooded at high water. It begins to send off branches to the gulf near the point where it enters the state, and the whole S. E. portion of the country lying on its right bank may be said to belong to the delta. The Red river enters from Arkansas in the N. W., and joins the Mississippi near the outflowing of the Atchafalaya, the first of the deltoid arms. It receives on its N. bank the Washita or Black and several smaller streams. The S. W. part of the state is drained by the Sabine, forming the boundary with Texas, the Calcasieu, and the Mermentau. On the S. E. is the Pearl river, marking the frontier of Mississippi.—The face of the country is generally low and level, nowhere attaining an elevation of more than 200 feet above the sea. In Catahoula parish the elevation is only 68 feet above the gulf, while in the S. part nearly one fourth of the state lies but 10 feet above the sea, and is annually inundated by the spring floods. Most of the delta, and indeed the whole S. coast as far as Texas, is consequently occupied by salt marshes. In the centre are vast level prairies, and in the N. and W. the country is somewhat broken and diversified by low hilly ranges. This last region, comprising about one half of the entire state, consists principally of pine barrens, yielding an abundance of pitch pine, and containing also oak, elm, cypress, honey locust, and other timber. The E. corner of the state, lying between the Mississippi and Pearl and Lake Pontchartrain, and the state of Mississippi, resembles the region last described in general configuration and

forest growth.—Louisiana presents many features of geological interest. In ascending the Mississippi, its banks, protected in the lower part of the river by levees, first rise to form a natural barrier a few feet above the highest level of the river at Baton Rouge; at Port Hudson, 25 m. further up, the bluffs are nearly 100 feet high; and at Natchez they attain a height of 200 feet. The sections thus exposed by the rivers present to view the layers of clay, loam, sand, pebbles, and vegetable matter, that make up the alluvial deposits of which all the lower portion of the state is composed. Among these, as at Port Hudson, are seen at different levels, the lowest at the level of low water, beds of black mud with standing stumps of cypress and other trees, which must have grown in the spots where they are now found. Local subsidence of the surface and reëlevation can alone explain the phenomenon of the repetition of such beds at different levels. These deposits are characterized by land and fresh water shells like those now living in the vicinity, and they also contain bones of the mastodon, megalonyx, and various quadrupeds, mostly of extinct species. The tertiary of the eocene period is met with underlying the alluvial beds at Vicksburg near the level of the river, and the formation is traced westward, extending over all the N. part of the state, and nearly as far S. as Alexandria on the Red river. Beds of brown coal are found in the tertiary, and salt springs are common, some of which have been worked; but the mineral productions are of little importance. (See MISSISSIPPI RIVER.)—The soil of the river bottoms is exuberantly fertile, and the alluvial land is easily drained. Most of it is heavily timbered and covered with an undergrowth of cane. The prairies are not generally productive, and in some places are quite barren. The climate in winter, owing to north winds, is more severe than in corresponding latitudes on the Atlantic coast. The summers are long and hot, and mephitic exhalations from the marshes in autumn produce yellow fever and numerous other diseases. The vegetable productions of Louisiana comprise, among forest trees, the walnut, oak, sassafras, ash, hickory, poplar, locust, mulberry, magnolia, cottonwood, buckeye, papaw, cypress, pine, elm, maple, willow, hackberry, pecan, dogwood, and persimmon. The wild cane grows to a height of 15 to 30 feet. The peach, quince, plum, and fig are the principal fruits. The apple is also cultivated in the north. The staples of agriculture are cotton, sugar, and, to a less extent, rice, maize, and tobacco. Good pasturage is found on the prairies. In 1857-'8, according to Champomier, sugar was produced in 23 parishes, in which there were 1,294 sugar houses (988 worked by steam and 356 by horse power), and which produced 279,697 hhds. or 307,666,700 lbs. of sugar. Sugar culture was introduced in 1751, but there are no reports of production until 1828, when 88,000 hhds. were manufactured; from that year to 1888 the crops varied from 30,000 to

100,000 hhds., and thence to 1848 from 87,000 to 240,000 hhds. In 1849 the crop yielded 247,923 hhds., and thence yearly, to 1858 inclusive, 311,201, 236,547, 321,934, 449,324, 346,685, 231,427, 73,976, and 279,697 hhds. The product of Louisiana is very uncertain; it formerly, says Champomier, reached as high as 3,000 or 4,000 lbs., and in some cases even 6,000 lbs. to the acre; but for the last few years it has often ranged as low as 500 to 1,000 lbs. In Mauritius the product was formerly from 2,000 to 2,500 lbs. to the acre, but since the application of guano to the land the product in ordinary seasons is 6,000, 7,000, or even 8,000 lbs. The assessors' returns in 1855 differ somewhat from the above, and show that in that year 248,195 acres of land were cultivated in sugar cane, and produced 288,466 hds. of sugar and 1,285,888 bbls. of molasses. The amount of land cultivated in cotton in the same year was 616,788 acres, in Indian corn 642,391 acres, and in rice 3,177 acres; the products were 368,077 bales of cotton, 10,717,080 bushels of corn, and 81,449 bbls. of rice. According to the census of 1850, there were in the state 13,422 farms and plantations covering 4,989,043 acres, of which only 1,590,035 acres were under cultivation. These were valued at \$75,814,398, and the implements and machinery thereon at \$11,576,938. The live stock in 1850 consisted of 89,514 horses, 44,849 asses and mules, 105,576 milch cows, 54,968 working oxen, 414,798 other cattle, 110,838 sheep, and 597,801 swine, valued altogether at \$11,152,275; and the value of animals slaughtered in the census year was \$1,458,990. The products of agriculture proper consisted of wheat 417, rye 475, oats 89,637, and Indian corn 10,266,873 bushels; potatoes, Irish, 95,632, and sweet, 1,428,458 bushels; hay, 25,752 tons; hops, 125 lbs.; clover and grass seed, 99 bushels; products of market gardens, \$148,329, and of orchards, \$22,359; cane sugar 226,000 lbs., and molasses 10,981,177 galls.; ginned cotton, 178,737 bales of 1,000 lbs.; rough rice, 4,425,349 lbs.; tobacco, 26,878 lbs.; butter 688,069, and cheese 1,957 lbs.; beeswax and honey, 96,701 lbs.; wool, 109,897 lbs. The value of home manufactures in 1840 was \$65,190, and in 1850, \$189,232. The actual crops per acre in 1849 were as follows: Indian corn 16 bushels, rice 1,400 lbs., seed cotton 550 lbs., sweet potatoes 175 bushels, and cane sugar 1,000 lbs. The number of cotton plantations was 4,206, and of sugar planters 1,558. The total value of agricultural products in 1840 was \$17,976,017, and in 1850 only \$15,210,299. Manufactures, mining, and the mechanic arts were carried on in 1,017 establishments, in which a capital of \$5,318,074 was invested. In 1849-'50 the value of raw material used was \$2,958,988; the number of hands employed, 6,437, viz., 5,581 males and 856 females, at an annual cost of \$3,086,212; and the value of products was \$7,320,948.—The principal exports to foreign countries are cotton, sugar, and agricultural products generally, the produce not only of

Louisiana, but also of the whole valley of the Mississippi river, and a large portion of Texas and Mississippi, all of which are tributary to the commerce of New Orleans, which in 1850 received from the interior merchandise to the value of \$106,924,088, in 1855 to that of \$117,106,823, and in 1858 to that of \$167,155,546. The great bulk of this is exported coastwise, and by the same course the country receives its principal imports from the Atlantic ports. The direct foreign commerce of New Orleans indeed is comparatively but a small portion of the whole of the vast trade of which it is the centre. The tonnage and values of cargoes to and from foreign countries for the 10 years ending June 30, 1859, are represented in the following table:

Years.	Tons entered.	Tons cleared.	Imports.	Exports.
1850.....	350,858	340,987	\$10,760,499	\$23,105,359
1851.....	339,953	431,566	12,038,480	54,413,953
1852.....	494,331	544,433	12,057,734	49,055,555
1853.....	573,313	630,390	13,630,636	63,233,036
1854.....	499,327	608,755	14,432,154	62,621,523
1855.....	445,302	604,403	12,900,521	55,327,523
1856.....	370,965	773,163	16,833,522	59,327,523
1857.....	613,314	723,333	24,594,967	91,324,523
1858.....	539,047	733,333	19,533,033	53,323,523
1859.....	661,415	803,243	13,349,516	101,000,323

The foreign commerce of the state is principally with Great Britain, Cuba, France, Bremen, Spain, Brazil, and Mexico. In 1849 the shipping owned in the state amounted to 241,497 tons, of which 146,413 tons were steam; and in 1859 to 219,622 tons, of which 78,620 tons were steam. About 1,500 to 1,800 tons of shipping is annually built.—Within a few years a railroad has been constructed from New Orleans to Canton, 206 m. long, at a cost of \$7,142,563, and this with its connections reaches all the country north and the great systems extending to the Atlantic and to the westward. Another great railroad is projected from New Orleans to Houston, and also to Shreveport and northern Texas; and about 80 m. (cost \$5,877,525) of this are already in operation. There are also several short railroads. The state has several canals which are used as connecting links to its internal navigable waters. Externally it has steamship communication with all the domestic as well as foreign ports of the gulf, and with New York.—On Jan. 1, 1860, Louisiana had 19 banks, the liabilities of which were. capital \$24,215,682, circulation \$2,147,689, deposits \$22,586,731, profits on hand \$6,475,302, total \$55,425,411; and their resources: notes, bills of exchange, &c., \$37,182,643, specie \$15,847,268, real estate \$3,395,500, total \$55,425,411.—The government is based on the constitution of 1852, which guarantees the right of voting to every free white male citizen of the United States who has been one year a resident of the state and of the parish. The law-making power is confided to a legislature consisting of 32 senators, and not more than 100 nor fewer than 70 representatives. Senators must be at least 27 years of age and legal citizens of the state; they are elected for 4 years, one half every 2d year. Representatives are chosen for 2 years, are required to

be 21 years of age, and like the senators are paid \$4 a day. The legislature meets annually, and its sessions cannot be prolonged over 60 days. The governor (salary \$4,000) and lieutenant-governor (salary as president of the senate, \$8 a day) are elected by a plurality of votes for 4 years, and are required to be 35 years of age and residents of the state for 15 years. The principal other officers are the secretary of state (salary \$2,500), attorney-general (\$8,500), treasurer (\$2,500), auditor of accounts (\$4,000), surveyor-general (\$600), superintendent of public education (\$2,000), and state engineer (\$8,500). The judiciary consists of a supreme court, presided over by a chief justice and 4 associate judges, all elected by the people for 10 years; 18 district courts, and 6 special district courts in New Orleans. Judges of the inferior courts, the attorney-general, district attorneys, and other court officers, are elected by the people. In civil jurisprudence Louisiana has adhered to the systems of law which prevailed under the Spanish and French colonial administrations. In June, 1806, the territorial legislature passed an act appointing Messrs. James Brown and Louis Moreau-Lislet to prepare a civil code for the use of the territory, based upon the Spanish civil law, which still prevailed there. The result of their labors was the code of 1808, which remained in force until 1825, when a new code, based upon the preceding, being in fact a revision of it, with the addition of many articles from the *Code Napoléon*, was substituted for it. The code of 1825, known as the Louisiana civil code, was digested by Messrs. Edward Livingston and Moreau-Lislet. The sources of revenue are direct taxes, sales of public lands, and licenses of trades and professions. The total receipts for the year ending Dec. 31, 1858, amounted to \$1,819,741.69, and the total resources, including a remainder from the last financial term (\$1,058,058.76), to \$2,877,800.45. The expenditures are on account of the public debt, schools, the legislature, executive and judiciary, public buildings, charity hospital, deaf and dumb, orphans, the penitentiary, &c., and amounted in 1858 to \$1,872,053.43. The state debt, properly so called, amounted on Dec. 31, 1858, to \$4,379,090.95; to this should be added the state's liability for the property banks, \$6,124,811.10, and for the 2d municipality of New Orleans, \$198,240, making a total of \$10,701,641.75. To this period the state had also issued \$2,818,000 of state bonds to railroad companies. The valuation of taxable property in 1850 was \$220,165,172, and in 1857, \$378,911,905. In the latter year the tax assessed amounted to \$1,398,349.61. The principal institutions supported wholly or in part by the state are the deaf and dumb and blind asylum at Baton Rouge, the insane asylum at Jackson, the charity hospital at New Orleans, and the Louisiana penitentiary at Baton Rouge.—In 1850, according to the U. S. census, there were in Louisiana 664 public schools, with 822 teachers and 25,046 scholars, and an annual in-

come of \$349,679; 148 academies and private schools, with 354 teachers and 5,328 scholars, and an annual income of \$193,077; and 6 colleges, with 41 professors and 629 students, and an annual income of \$85,750. The number of children attending school as returned by families was 84,057, or one to every 8.01 of the free population. The number of free persons over 20 years of age who could not read and write was 24,610, of whom 21,221 were white, and 3,389 free colored persons. In 1856 the number of public schools in the state was 749, with 17,949 scholars, and 18,472 children were attending other schools; the total school population was 73,822. The school fund in 1859 amounted to \$899,500, and the seminary fund to \$187,000; total, \$1,086,500. These are invested in the state debt. The constitution provides that "free schools shall be established throughout the state; the proceeds of lands granted for the purpose and of lands escheated to the state shall be held as a permanent fund, on which 6 per cent. interest shall be paid by the state for the support of these schools." The yearly sum of \$250,000 is now appropriated for the support of such schools, and is derived from a special tax of one mill on the dollar and a poll tax of \$1 on each white male inhabitant. The whole amount apportioned to the several parishes in 1856 was \$312,235. The principal collegiate and professional schools in the state are as follows: the university of Louisiana (with 8 departments), at New Orleans, founded in 1836; St. Charles college, at Grand Coteau, 1838; Baton Rouge college, at Baton Rouge, 1838; Franklin college, at Opelousas, 1839; the Centenary college, at Jackson, 1845; and a state seminary near Alexandria, on the plan of the Virginia military institute, organized in 1859, with 50 cadets, and capable of sustaining 200 cadets, annually. The number of churches in the state in 1850 was 307, viz.: Baptist 77, Christian 3, Episcopal 15, Free 3, German Reformed 1, Jewish 1, Methodist 125, Presbyterian 18, Roman Catholic 55, Union 6, Universalist 1, and minor sects 2. These provided accommodation for 109,615 persons, and as property were valued at \$1,782,470. The newspaper and periodical press of Louisiana in the same year consisted of 55 distinct publications, of which 11 were issued daily, 6 tri-weekly, 37 weekly, and 6 monthly; of these, 13 were literary, 6 neutral and independent, 34 political, 1 religious, and 1 scientific. The aggregate issue was 80,847 copies, or annually 12,416,224 copies. The number of libraries (not including private) was 10, of which 5 with 9,800 volumes were public, 2 with 12,000 volumes school, and 3 with 5,000 volumes college libraries. The number of paupers in the state on June 1, 1850, was 106, and the number supported wholly or in part in the year preceding had been 423; cost \$39,806. The number of convicts in prison, June 1, 1850, was 266, and the number convicted in the year preceding was 297. The convicts are chiefly employed in the manufacture of cotton and hemp.—The Span-

iards navigated the gulf of Mexico for two centuries without being aware that one of the largest rivers of the world falls into it. This fact may be explained from the circumstance that a low, flat, and dangerous coast extends on both sides of its outlet to a great distance. The French after their establishment in Canada obtained some information as to the Mississippi about 1660, but did not discover its mouth before 1699, when Iberville founded his first colony. The city of New Orleans was founded in 1717, about which time the colony began to assume importance; and it soon afterward acquired universal notoriety from having been granted to the company formed by John Law at Paris in 1716, and incorporated as the Mississippi company. When this scheme, called the "Mississippi bubble," burst, the country was resumed by the crown, and the commerce of the river declared free. The French remained in possession of Louisiana until 1762, when they ceded it to Spain. From neglect, and notwithstanding the great natural resources, little improvement was effected under the new rule, which was never popular. In 1800 Bonaparte, then first consul, succeeded in inducing the Spanish government to retrocede Louisiana to France. It was held for a time, but only nominally, as a French colony, and only long enough to enable Bonaparte to complete a sale of it to the United States, which he succeeded in doing in 1803 for the sum of \$15,000,000. The country comprehended in this purchase included not only the present state of Louisiana, but also all the country to the N. and W. between the Mississippi and the Pacific, excepting such portions as were then occupied by Spain, and as far north as the British territory. This vast country is now occupied by the states of Arkansas, Missouri, and Iowa, the greater part of the state of Minnesota, and the Nebraska, Kansas, and Indian territories. The American flag was first raised in New Orleans on Dec. 20, 1803. By the act of congress of March 26, 1804, the territory was divided into two governments, that of Orleans including the present state of Louisiana, and that of Louisiana all the country N. and W. of it. In 1810 the United States dispossessed Spain of a large part of West Florida, extending from the Mississippi to the Perdido, S. of the 31st parallel, and subsequently annexed that part of it W. of Pearl river to the new territory. On Feb. 11, 1811, an act of congress was passed to enable the inhabitants to form a constitution and state government; and by a subsequent act of April 8, 1812, the territory of Orleans was admitted into the Union under the title of the state of Louisiana. On June 4 of the same year the territory theretofore known as Louisiana had its designation altered to Missouri. The share that Louisiana took in the war of 1812 is familiar to all. The great battle fought at New Orleans, Jan. 8, 1815, in which the British sustained a total defeat, was the crowning event of the period, and the last hostile engagement

between the two nations. Since this time the progress of the state has been rapid. With the development of the great central valley its commerce has expanded at a wonderful rate, and become so vast as to give it rank as the second commercial state of the Union. In 1845 Louisiana framed a new constitution, which was reframed and reordained in 1852.

LOUISVILLE, a city and the capital of Jefferson co., Ky., situated at the falls of the Ohio, in lat. 38° 3' N., long. 85° 30' W., 130 m. below Cincinnati, and 53 m. W. from Frankfort; pop. in 1840, 21,210; in 1850, 43,196; in 1860, about 80,000. The city is built upon a level plain about 75 feet above low water mark. The streets are wide, well paved, straight, lighted with gas, and cross each other at right angles. Main street is about 3 miles long, and is remarkably handsome and well built. The streets in that part of the city devoted to private residences are commonly lined with ornamental shade trees. The city is abundantly supplied with water by water works. Dupont's Artesian well is one of the deepest in the world, its depth being 2,086 feet, and its bore 8 inches; the flow of water is 330,000 gallons in 24 hours, and the elevation above the surface 170 feet. The public buildings are a fine court house, erected at a cost of over \$1,000,000, a gaol, custom house, city hall, the university, 2 marine asylums, 3 orphan asylums, a house of refuge, an institution for the blind, 60 churches and 2 synagogues, 5 banks of issue and many others of deposit, 4 spacious market houses, and 12 very handsome public school edifices. There are 5 daily and 12 weekly newspapers, and 2 semi-monthly and 3 monthly magazines. There is a great number of literary, scientific, charitable, and other associations. Louisville is very extensively engaged in manufactures, the condition of which in 1860 is shown by the following table:

Manufacturing Establishments.	No.	Hands employed.	Capital.
Agricultural implements	5	250	\$142,000
Brass foundries	5	102	80,000
Carriages and wagons	17	174	108,000
Clothing	19	924	144,000
Furniture	19	146	122,000
Iron rolling mill	1	140	250,000
Machine works	21	998	550,000
Soap and candles	6	125	232,000
Tobacco and cigars	28	1,150	250,000
Flour	7	65	267,000
Tan yards	16	100	100,000
Lumber and planing mills	19	160	800,000
Blacksmiths	29	190	108,000
Breweries	14	64	150,000
Lard oil	5	73	100,000
Rope and cordage	9	170	...
Woolen and cotton mills	4	75	50,000
Piano-fortes	1	62	80,000
Paper making	1	90	70,000
Stove and hollow ware	2	275	230,000
Hydraulic machine works	1	130	75,000
Machine and finishing shops	8	80	20,000
Marble and stone works	15	150	80,000
Upholsterers	7	55	80,000
Lumber yards	15	60	500,000
Saddle, harness, and trunks	21	108	100,000

Beside the above there are 3 boat building yards.

The Louisville and New Orleans packets, which are built and mostly owned here, are noted for their speed, elegance, and safety. The chief source of the prosperity of Louisville has been its commerce. It has uninterrupted intercourse most of the year by means of the Ohio with nearly all the towns and cities of the great West, and is in direct communication by railroad with all points north, south, east, and west. The commerce of the city is estimated at over \$100,000,000 per annum, and is rapidly increasing. The exports comprise every species of western produce and manufactures; those of pork and other products of the hog exceed \$3,000,000 in value per annum. The principal imports are dry goods, groceries, hardware, and cutlery. There are 8 pork packing establishments, employing over 1,200 men and a capital of about \$2,125,000. The following table shows the number of hogs slaughtered in Louisville from 1858 to 1858:

Seasons.	No. hogs.	Sls. pork.	Lbs. lard.
1858-'4.....	407,775	124,879	15,847,284
1854-'5.....	238,788	65,102	8,915,546
1855-'6.....	332,254	88,039	11,800,760
1856-'7.....	245,380	62,920	7,867,991
1857-'8.....	253,908	88,810	8,759,938
Total.....	1,532,550	423,240	53,260,520

The tobacco business is also carried on extensively in this city. There are three immense warehouses for storing and selling this staple, which are capable of holding 7,000 hogsheads. The aggregate sales of these houses amount to about 19,000 hogsheads annually, realizing the sum of about \$2,500,000.—The first settlement on the site of the present city was made in the spring of 1778, when a few families came to the falls under Gen. George Rogers Clark. In 1780 the legislature of Virginia passed "an act for establishing the town of Louisville at the falls of the Ohio," naming the town in honor of Louis XVI., whose troops were then aiding the Americans in their revolutionary struggle. The settlement was for several years greatly annoyed by the Indians. The town was for some 20 years very unhealthy, but it is now, perhaps, the healthiest city of its size in the world.

LOUSE. See EPISOA, vol. vii. p. 258.

LOUTH, an E. co. of Ireland, in the province of Leinster, bounded N. by Armagh and Down, E. by the Irish sea, S. by Meath, and W. by Meath and Monaghan; area, 322 sq. m.; pop. in 1851, 107,657. The surface in the N. is rugged and mountainous, elsewhere level and undulating, and the soil generally fertile. It returns 4 members to parliament, including 2 for the boroughs of Drogheda and Dundalk.

LOUVAIN, a town of Belgium, in the province of Brabant, situated on the Dyle, 27½ m. E. by N. from Brussels; pop. in 1857, 80,765. The streets are regular, but the houses are not well built. It is celebrated for its town hall, a fine Gothic building, for its cathedral, which

is one of the most beautiful religious edifices in Belgium, and for its university, at one time celebrated among the literary institutions of Europe, and still the leading school of Roman Catholic theology in Belgium, attended by about 600 students (8,000 in the 16th century), and containing 20 colleges (formerly 48), zoological and mineralogical museums, a botanic garden, and an extensive library. Jansenius, the founder of Jansenism, was among the most celebrated professors there. St. Gertrude's church and St. Michael's are noteworthy, the former on account of its celebrated oaken stalls with detached groups, statues, and bass-reliefs, and the latter for containing many of the best paintings of modern Belgian artists. Beside the many pictures of the Flemish masters in the cathedral, Louvain possesses in the gallery belonging to M. Vandenschrieck a very valuable collection of paintings by native artists. The town transacts a considerable business in the agricultural produce and manufactures of the country. The principal trade is in beer, of which 200,000 casks are made annually. Vessels of 150 tons can reach the town through the canal of Louvain. The town, although its activity is now increasing, presents a desolate aspect, compared to former times, when it was the capital of Brabant, the residence of the dukes, and possessed a population of 100,000, mostly engaged in the manufacture of woollens. The weavers revolted against the duke of Brabant in 1483, and many of them, being banished, transplanted their industry to England.—The foundation of Louvain is attributed by some authorities to Julius Cæsar, and the old castle is still called *Château de César*, although it is known to have been built at the end of the 9th century as a defence against the Northmen. The walls of the town, built in the middle of the 12th century, now partly turned into boulevards, measure 7 m. in circumference. Edward III. of England resided for some time in the castle of Louvain, and the emperor Charles V. was brought up there. The town was unsuccessfully besieged by various powers during the 15th, 16th, and 17th centuries. Taken by the French in 1756 and 1792, it fell in 1793 into the hands of the Austrians, and was retaken by Gen. Kléber in 1794 and annexed to France, as the capital of an *arrondissement* of the department of Dyle. An engagement between the Dutch and Belgians took place outside of its walls in Aug. 1831, when the present king Leopold narrowly escaped being captured by his opponents.

LOUVET DE COUVRAY, JEAN BAPTISTE, a French author and revolutionist, born in Paris, June 11, 1760, died Aug. 25, 1797. During his youth he was employed in a bookseller's shop kept by one Prault, where he acquired a knowledge of literature which he employed in the service of the revolution by writing stories, of which the notorious *Aventures du chevalier de Faublas* is the best known. At this time a licentious literature, in the form of novels professing to

set forth the corruptions of aristocratic society, was all the rage. Ladies of the highest rank called without a blush at the booksellers' for works of the vilest character. *Faublas* attained among such readers an incredible success. Louvet subsequently distinguished himself by proposing a decree against the emigrant Bourbon princes and nobility, and was employed to edit *La sentinelle*, "a sort of pillory to which royalty was attached every morning and insulted." After Aug. 10, 1792, he was chosen deputy from Loiret, and assumed a more moderate position. He joined the Gironde, and attacked Robespierre in a speech which is praised as a model of clearness, reason, energy, and courage. He was proscribed with the Girondists, but escaped and remained concealed until the 8th Thermidor. He was now recalled to the convention, and was elected to the council of 500. He finally became a bookseller in the Palais Royal, and married a beauty, the noted Lodoiska. A storm of ridicule now burst on Louvet, who had himself ridiculed others so cruelly. Overwhelmed by pamphlets and insults, the man who had placarded Paris with abuse appealed to the law. He finally died neglected and obscure. His wife, who was warmly devoted to him, wished not to survive his death, but was thwarted in her attempt to poison herself. Louvet was among the most eloquent speakers of the revolution, and Mme. Roland has left a eulogium on him, which posterity, says Jules Janin, "would have acquiesced in had he only died sooner." In addition to *Faublas*, he wrote *Émilie de Valmont, ou le divorce nécessaire*; *Paris justifié*; *Récit de mes périls*; several political addresses, and 2 or 3 comedies, beside many anonymous productions.

LOUVIERS, a town of France, in the department of Eure, situated on the river of that name, about 17 m. S. from Rouen and 70 m. N. W. from Paris; pop. in 1856, 9,457. Among its principal public edifices is the cathedral, built during the crusades, and the *maison des templiers*, a Gothic building of the 13th or 14th century. It is one of the principal manufacturing towns for cloth, contains 80 manufactories and 20 spinning mills for woollen yarn, which employ nearly 6,000 persons in and around the town. The total value of various goods manufactured in the arrondissement of Louviers amounts to \$6,000,000 annually. Formerly the town was celebrated for its linen manufactures, which however were abandoned in the 16th century, and toward the end of the 17th century those of cloth were established. In ancient times Louviers was surrounded by fortifications. Philip Augustus and Richard Cœur de Lion concluded a treaty of peace there in 1196. It joined the league, and when Rouen fell into the hands of the Huguenots, its parliament assembled in Louviers.

LOUVOIS, FRANÇOIS MICHEL LE TELLIER, marquis de, a French statesman, born in Paris, Jan. 18, 1641, died there, July 16, 1691. He

was the son of Michel Le Tellier, for many years minister of war under Louis XIV., and by whose influence he was enabled upon coming of age to assume the duties of the same office. At the age of 21 he was married to Anne de Souvré, marquise de Courtanvaux, the richest heiress in France, and soon after renounced the dissipations and pleasures of the court, to which he had been greatly addicted, and, as a preparation for his future functions, examined into the condition of the army, visited the different fortified places in the kingdom, and in various ways endeavored to impress the king favorably by his industry and capacity for business. At the same time he flattered him with the idea that the most successful measures were the result of the royal suggestions, until Louis gradually began to consider the young minister as in some sort his own pupil in the art of statesmanship. By careful management Louvois was thus enabled, in spite of his haughty and overbearing disposition, which made him unpopular with both courtiers and people, to assume and retain for more than a quarter of a century so great an ascendancy in the royal councils that Mme. de Sévigné, writing about him in 1676, said: "He possesses absolute power, and armies advance or retreat at his pleasure." From 1667, about which time he assumed the sole direction of the war department, until the peace of Nimeguen in 1678, he was incessantly employed in planning and conducting campaigns, sharing sometimes with Turenne, Condé, or Luxembourg the credit of the successes which crowned the French arms, and exhibiting an energy, tact, and unscrupulousness which even his enemies were obliged to confess rendered him an apt instrument to further the ambitious projects of his master. The cruel devastation of the Palatinate during this war, which stains the military glory of Louis and Turenne, is generally supposed to have been instigated by Louvois. He showed some regard, however, for the condition of disabled soldiers, and it is mentioned to his credit that he conceived the plan of the *Hôtel des Invalides* in Paris, beside establishing hospitals and asylums in various parts of the country. The condition of the soldiers while in service was also much ameliorated, and under his administration military discipline was brought to a considerable degree of perfection, regular grades of rank were established, and the different arms of the service were first distinguished by uniforms. He also organized the departments of artillery and engineers, for which he founded schools of instruction, and managed the whole vast and complicated system over which he presided with a precision previously unknown in French history. In times of peace his plans for the aggrandizement of the kingdom were scarcely less magnificent than his achievements in war. Thanks to the abundant resources which the sagacity of Colbert had collected, and which the long war ending with the peace of Nimeguen had not wholly dissipated, Louvois was able to project the palace of Versailles, the

Place Vendôme in Paris, the great aqueducts of Maintenon, and other magnificent public works which will long be identified with his name. The death in 1683 of Colbert, who had always protected the Huguenots, having given Louvois almost absolute power, he instigated the king to persecute this class of his subjects. Finding argument of no avail to convert them, he had resort to force, and the royal dragoons are said to have waged a war of extermination upon them, whole families being sometimes ruthlessly slaughtered. Finally, in Oct. 1685, at the earnest suggestion of Louvois, the edict of Nantes was revoked, and the emigration of Huguenots which followed deprived the kingdom of upward of half a million of its most industrious and useful population. In 1688 war broke out between France and the league of continental powers headed by the prince of Orange, and the energy and capacity of Louvois became if possible more conspicuous than ever, while the number of his personal enemies daily increased. Again the Palatinate was barbarously ravaged, and the ambition of the war minister satiated at the expense of humanity. His dictatorial manner and affectation of supreme control, however, were beginning to incense the king against him; and after the siege and capture of Mons in 1691, during which he had provoked Louis by repeated contradictions, the cold and altered manner of the latter satisfied the court that the overthrow of Louvois was impending. He still however persisted in visiting the palace at Versailles; and on one occasion the king, after reproaching him with the numerous cruelties perpetrated under the royal name, but in reality planned by Louvois, was only prevented by the interposition of Mme. de Maintenon from striking his minister. Wearied by incessant labors and alarmed by these slights, Louvois declined rapidly in health, and died suddenly after a stormy interview with his master, not without suspicion of poison. Louis heard without emotion of the death of the minister whose talents had so enhanced the military glory of France; and to the court, and more especially to the people, who had long groaned under the severe taxes imposed upon them by Louvois for the support of armies, the event was the occasion of rejoicing rather than of sorrow.

LOUVRE, a celebrated public building of Paris, situated in the W. part of the city, near the right bank of the Seine. It consists of the old and the new Louvre. The old Louvre forms nearly a square 576 feet long and 588 wide, enclosing a quadrangle of about 400 feet square, and containing a vast collection of sculptures, paintings, and other works of art. Its E. façade, looking toward the church of St. Germain l'Auxerrois, is a colonnade of 28 coupled Corinthian columns, and is one of the finest works of architecture of any age or country. The new Louvre, inaugurated Aug. 17, 1857, consists of two lateral piles of buildings projecting at right angles from the two parallel galleries which join the old Louvre with the Tuileries, and forming the E.

boundary of the place du Carrousel. Between the place or square called Napoleon III. and the rue Rivoli, they present on the E. side a frontage of nearly 800 feet, intersected by three sumptuous pavilions, intended to be occupied by the departments of state and of the interior, by the administration of the telegraphs, by the imperial library of the Louvre, and by a permanent exhibition of fine arts. On the other side of the square are galleries set apart for periodical exhibitions of the works of living artists. In the central part of the building, between the gallery facing the quay and that opposite the place Napoleon, is the council chamber, to be used as an assembly room for the public bodies of the empire on the opening of the legislature and on other solemn occasions, which communicates through the museum gallery with the palace of the Tuileries.—The Louvre was originally probably a hunting lodge, upon the site of which a tower was erected in 1214 by Philip Augustus to serve as a state prison and arsenal. It was enlarged and embellished by several of his successors, especially by Charles V., who placed in it the royal collection of books, which became the nucleus of the royal library, and fitted it up as a royal residence, providing it with gardens and terraces. Under Charles VI. and VII., Louis XI., Charles VIII., and Louis XII., it was converted into a fortress. During the reign of Francis I. plans for the improvement of the building were designed by Lescot, and executed chiefly under the reign of Henry II. by that artist, who was aided by Jean Goujon and Paul Ponceau. About the same period one of the galleries was built by Serlio, an architect of Bologna, and covered with a terrace under the auspices of Henry IV., who also conceived the project of uniting the Louvre with the Tuileries, which to some extent was carried out by Louis XIV., mainly through the exertions of Colbert, under whose direction a powerful impetus was given to the enlargement of the palace. From the end of the reign of that monarch, however, the works were interrupted until the middle of the 18th century, when, under the direction of M. de Marigny, the architect Gabriel was employed in finishing the three façades, which had been commenced by Claude Perrault under Colbert's administration, while the vestibule on the side of the rue Marengo was completed by Soufflot. The work was once more interrupted by the revolution, when the Louvre was declared national property, and its contents roughly handled by the populace. When the great number of works of art seized in Italy by the armies of Napoleon made it necessary to assign a proper place for their reception, the architect Raimond was selected to conduct the work; and Percier and Fontaine, who in 1803 were charged by Napoleon with its resumption, built the great staircase of the museum proper, the museums of ancient art, the staircases on the two extreme ends of the colonnade, the Egyptian museum, the chambers for

the council of state, which are now destined to receive the designs of all the various schools of art, the marine museum, and other portions of the Louvre. After the restoration the work was again brought to a standstill. The only activity displayed by the Bourbons consisted in causing the initials of Napoleon, which were inscribed in many parts of the palace, to be erased. Under the government of Louis Philippe, Thiers offered a resolution to appropriate 18,000,000 francs to the completion of the building, which was rejected; and nothing was done until after the revolution of 1848, when 2,000,000 francs were devoted by the provisional government to the repairs of the old Louvre under the direction of M. Duban, who restored the Apollo gallery. The decorations of the interior were intrusted to Delacroix and other eminent artists. The resolution passed by the provisional government in favor of the completion of the whole building was carried into effect July 25, 1852, when the foundation stone of the new Louvre was laid, which was completed in 1857 at a cost of nearly \$6,000,000. The architect Visconti conducted the work until his death, Dec. 1, 1853, when he was succeeded by M. Lefuel. The Louvre and the Tuileries, both now completed and harmonized, form almost one single palace of unparalleled splendor and magnitude, and occupy with their enclosures an area of nearly 60 acres.

LOVAT, SIMON FRASER, lord, a Scottish Jacobite, chief of the clan Fraser, born probably in Tanich, Ross-shire, about 1667, beheaded on Tower hill, London, April 9, 1747. His father, Thomas Fraser, 8d son of the 9th Lord Lovat, eventually succeeded his grand-nephew, the 11th Lord Lovat, as 12th lord. Simon Fraser was educated at the university of Aberdeen, where he had a reputation for scholarship, and about 1694 accepted a commission in a highland regiment raised by Lord Murray, on the assurance that, although ostensibly in the service of King William, it was really intended for King James, whenever the opportunity to assert his rights to the crown should occur. The duplicity and treachery thus early manifested never ceased to characterize his conduct. His father succeeded to the title in 1696, and upon his death in 1699 Simon became 18th Lord Lovat and chief of the Frasers. For several years he was engaged in a series of lawless but unsuccessful attempts to secure the estates of his cousin, the 11th lord, with whose daughter and heiress he even made a fruitless attempt to elope. He next effected a forced marriage with the dowager Lady Lovat, widow of the 11th lord, in the hope of being acknowledged the head of the house and owner of the estates. Having been outlawed for this offence, he went to France, and embraced the cause of James II., to obtain whose confidence and protection he renounced the Protestant faith and embraced that of the Roman Catholics. In 1703 he returned to Scotland as a secret emissary to stir up the highlanders in

favor of the pretender; but, his principal object still being to obtain possession of the Lovat estates, he determined as the best means of effecting this to reconcile himself with the government, and betrayed the plot in which he was engaged to the duke of Queensberry. By the confession of two of his confederates his treachery became known to the English and French courts, and upon his return to France he was subjected to a confinement of 10 years, 8 of which were passed in the castle of Angoulême, and the remainder in Saumur. The current story that in this interval he took orders, and for some years discharged the duties of a priest at the college of St. Omer, is not sufficiently substantiated. During his imprisonment the heiress of Lovat, in whose person by a decree of the court of session of 1702 vested the family honors and possessions, was married to Mackenzie, Lord Fraserdale; and the object of his ambition being thus apparently removed from his reach, Lovat determined to espouse the Hanoverian cause. In Nov. 1714, he effected his escape into England, and had the prudence to remain quiet until the insurrection under the pretender in the succeeding year, when, putting himself at the head of the Frasers, he was instrumental in driving the insurgents out of Inverness. For his loyalty on this occasion he received a full pardon from government. Fraserdale had meanwhile joined the pretender, and, the insurrection being quelled, his estates were declared forfeited, and were subsequently, by a decree of the court of session, after long litigation, conferred upon Simon Fraser, who, by cultivating friendly relations with George I. and some of the prominent aristocratic families of Scotland, secured also a portion of the property forfeited by various highland chiefs. As the head of his clan he maintained considerable state, and in the same capacity also committed many cruel and lawless acts. He discouraged education, and according to one of his contemporaries did more to revive a clannish spirit, which had greatly declined since the revolution of 1688, than any other man. For many years he remained loyal, or seemingly so; but his title and estates having been secured to him, he withdrew his affections from the house of Hanover, from which he had nothing further to expect, and as early as 1729 was known to be in treasonable communication with the exiled Stuarts. Subsequent to 1737 he was the head of an association of highland chiefs the object of which was to procure the restoration of the pretender, in whose cause he professed to have expended large sums of money. Nevertheless, when Charles Edward landed in 1745, he avoided with selfish caution committing himself in his favor until some decided success should be achieved by the Jacobites. Even after the defeat of Sir John Cope at Gladsmuir he continued to pursue the game of deception which had now become almost a second nature with him, and sent his son with the Frasers to join the pretender's standard,

while he remained at home, ostensibly on account of his great age and infirmities, but in reality to watch the progress of the rebellion, intending in the event of its failure to fasten upon his son the responsibility of the treason committed. After the battle of Culloden the evidence of his complicity became so strong, however, that he was compelled to take refuge in a remote part of the highlands, where he led a wandering life, attended by a few devoted clansmen, and "hiding in bogs and hollow trees and caverns." He was at last discovered in an island in Loch Morar, and, being too old and infirm to travel fast, was conveyed by slow stages to London, arriving there Aug. 15, 1746. In December he was impeached in the house of lords, and on March 9, 1747, his trial commenced before that tribunal. The proceedings were grossly unfair, leading questions being put by the lord high treasurer and the attorney-general, and the prisoner being obliged to conduct his own defence with but slight assistance from counsel. After a trial of 10 days, during which he gave alternate proofs of extraordinary meanness, levity, and courage, he was found guilty and sentenced to be beheaded. Upon leaving the bar he exclaimed: "My lords and gentlemen, God Almighty bless you all. I wish you an everlasting farewell, for we shall not all meet in the same place again—I am sure of that." He met his fate with a composure and intrepidity worthy of a better man, repeating on the scaffold the words: *Dulce est decorum est pro patria mori*. His portrait, etched by Hogarth in 1746, represents a man of great obesity, and a heavy, sensual face. He was twice married, and upon his 2d wife he is said to have exercised the most terrible barbarities. A volume of autobiographical memoirs by him, written originally in French, many statements in which are of questionable veracity, was published in 1797. The best account of him is contained in the "Memoirs of Lord Lovat and Duncan Forbes," by J. H. Burton (London, 1847).

LOVE FEASTS. See AGAPÆ.

LOVELACE, LADY AUGUSTA ADA. See BYRON.

LOVELACE, RICHARD, an English poet, born in Woolwich, Kent, in 1618, died in London in 1658. He was graduated M.A. at Oxford in 1636, repaired to court, and was there much admired for his amiable disposition and handsome person. He espoused the royalist cause at the outbreak of the civil war, and gradually rose to the rank of colonel in the army. On the overthrow of his party he retired to his native county, and became soon after the bearer of a petition to the long parliament in favor of the king. This roused the ire of the republicans, who consigned him to prison until he found heavy bail for his peaceable deportment. In 1646 he entered the French service, and was wounded at the siege of Dunkirk. On returning to England in 1648, he was again thrown into prison, and there remained till the king had been executed. He is said

to have died in great poverty. He was the author of two volumes of lyrics addressed to his mistress, under the name of "Lucrecia." He also wrote two dramas, "The Scholar," a comedy, and "The Soldier," a tragedy, which are lost. The earliest edition of his poems appeared in 1649; the latest was published at Chiswick in 1817-'18.

LOVER, SAMUEL, an Irish author and painter, born in Dublin in 1797. His father, a stock broker in Dublin, intended him for commerce, but the son's natural predilections frustrated this design. His début in public occurred at a dinner given to Thomas Moore in Dublin in 1818, when he sang a song, the music and words of which were his own, in honor of the poet. He now became a contributor to the magazines, and about 1820 published a volume of "Legends and Stories of Ireland" (8vo., Dublin), of which a second series appeared in 1834. Shortly after the appearance of his first work he adopted the profession of a portrait and miniature painter. In 1834 he published his "Popular Tales and Legends of the Irish Peasantry" (12mo., Dublin), and in 1839 "Songs and Ballads" (London), comprising the "Angel's Whisper," "Molly Bawn," "The Four-Leaved Shamrock," "Rory O'More," &c. Some of his brief sketches of Irish character and even his songs were subsequently expanded into elaborate fictions, such as "Handy Andy" (London, 1842), "Rory O'More," and "Treasure Trove" (1844). He is also the author of a number of successful plays, operas, and extravaganzas. In 1844 he conceived the idea of reciting and singing his own works in public, and, after a lucrative tour in the chief towns of the United Kingdom, he visited in 1846 the United States and Canada, where his entertainment proved equally successful. Returning to England in 1848, he repeated his lectures, and then retired to private life. His last work is "Metrical Tales and other Poems" (4to., London, 1859). In 1856 he received from government a pension of £100 a year.

LOW COUNTRIES. See NETHERLANDS.

LOWE, SIR HUDSON, K.O.B., a British general, governor of St. Helena during the captivity of Napoleon, born in Galway, Ireland, July 28, 1769, died in 1844. He was the son of John H. Lowe of Grantham, near Lincoln, a surgeon-general in the British army. In early childhood he went to America with his father's regiment. He was educated at Salisbury school, and was appointed an ensign in the East Devon militia at the age of 13, but did not enter the army until 1787, when he received an ensign's commission in the 50th foot, and joined his regiment at Gibraltar. Here he remained till 1791-'2, when he travelled through Italy on furlough. He took part in the expedition to Corsica under Sir David Dundas, and in the subsequent brilliant campaign of Sir Charles Stuart in that island. For nearly two years he was quartered in Ajaccio, but singularly enough never saw any of the Bonaparte family. After serving

in Elba and in Portugal, and becoming a captain, he was ordered in 1797 to Minorca, where he organized from the refugee Corsicans a corps styled the Corsican rangers, of which he was made major, and which formed part of the command of Sir John Moore in the expedition to Egypt. Major Lowe was engaged in the battles of Aboukir and Alexandria, led the advance of the army at Cairo, and received the proposals for the surrender of that city. His extreme vigilance, method, and zeal in this campaign drew from Sir John Moore the eulogium: "Lowe, when you're at the outposts I always feel sure of a good night's rest." On the evacuation of Egypt his corps was ordered to Malta, and after the peace of Amiens disbanded. In 1802 he was appointed to the 7th fusiliers, and in 1803 on his return to England was made assistant quartermaster-general. The same year he was despatched on a secret mission to Portugal to ascertain its military condition and resources, and, after returning a favorable report, was ordered back to the Mediterranean to organize another corps of Corsican rangers, of which he was appointed lieutenant-colonel. With this regiment he served with the Anglo-Russian army throughout the war in Naples and Sicily. After Sir Sidney Smith's capture of the island of Capri, Lowe was placed in command of it with a garrison of 1,800 men, composed of his own and a Maltese regiment. He retained possession of the island till 1808, when it was attacked by Gen. Lamarque with 8,000 French troops. The Maltese regiment fled at their landing after a slight resistance, and Lowe, after bravely defending the town of Capri for 12 days against a superior force, and sustaining the loss of 600 of his own men, was compelled to surrender. After aiding in the capture of Ischia and Procida in 1809, Lieut. Col. Lowe in the autumn of the same year was engaged in the British expedition against the Ionian islands, which resulted in their conquest; he framed their provisional government, and presided over their civil as well as military administration for 2 years, winning the love and friendship of the islanders, who presented him with a sword of honor at his departure in 1812 for England. Early in 1813, together with Gen. Hope, Col. Lowe was intrusted with a mission to Sweden to induce the Swedish king to coöperate with the allies, and to Russia and Prussia to concert with the sovereigns of those countries the formation of a Russo-German legion. He was present with the allies at the battle of Bautzen, and there saw for the first time the emperor Napoleon. Subsequently he was attached as a military commissioner to the allied army under Blücher, ever his warm personal friend, and was present with him in every action in which he was afterward engaged, from Mookern and Leipsic to the surrender of Paris, 18 battles, in 11 of which Napoleon commanded in person. With the allies Col. Lowe entered Paris, and remained there till the suspension of hostilities and the

abdication of the emperor, of which great events he brought the first intelligence to London, April 9, 1814. He was immediately knighted by the prince regent, and in June following created a major-general. The king of Prussia conferred on him the Prussian order of military merit, and Alexander I. decorated him with the Russian order of St. George. During this summer he was appointed quartermaster-general of the army in the Netherlands, with the duty of inspecting and reporting on the fortresses to be established on that frontier as barriers against France. He held this post when Napoleon landed from Elba, and according to strict military rule was entitled to the same appointment in the army which the English immediately collected in Flanders. But the duke of Wellington, on accepting the command of this army, made it a condition that he should select his own staff officers, and chose for his quartermaster-general Col. Sir William Howe De Lancey, whose sister, the widow of Lieut. Col. William Johnson (eldest grandson of Sir William Johnson, the superintendent of the American Indians), Sir Hudson Lowe subsequently married. In May, 1815, Lowe was appointed to the command of a British force ordered to act in concert with an Austro-Sardinian army and Lord Exmouth's fleet, in an attack upon the southern coasts of France. He left Flanders in the beginning of June, and was thus absent from the great field of Waterloo. Sir Hudson felt acutely the course of the duke of Wellington toward him; and it was owing to this fact, and as a means of soothing his feelings, that, upon the surrender of Napoleon and his banishment to St. Helena, he was selected as the governor of that island and intrusted with the charge of the great captive. Cool, firm, utterly incorruptible, and noted for his strictness in carrying out instructions, possessed of a kind heart, warm feelings, and a very high sense of honor, but with a manner rendered unattractive by reason of a natural reserve and a mien rigidly military, the British government could not have placed in this delicate and responsible position a man upon whom more implicit reliance could be placed. The appointment was opposed to Sir Hudson's inclinations, entirely unlooked for and unsolicited, and accepted with reluctance, and without a single condition or stipulation of any kind whatever. The instructions of the British government were very minute, strict, and severe, and left but little to the discretion of the governor, who carried them out with as much lenity as was possible under the circumstances, without, however, being able to escape the odium which naturally attached itself to his office. Subsequently to his return from St. Helena on the death of Napoleon in 1821, he was appointed to the government of Antigua; but family reasons prevented his accepting it, and in 1825 he was made commander of the forces in Ceylon. On his way to that island he passed through Vienna and saw Prince Metternich,

who mentioned to him a conversation with Count Bertrand, in which the count, although of all the persons at Longwood the one with whom he had been brought most into collision, acknowledged that against him personally there was no matter of complaint. In 1830 Sir Hudson Lowe was promoted to be a lieutenant-general, and he returned to England in 1831. In 1853 the "History of the Captivity of Napoleon," from his letters and journals, was published by William Forsyth.

LOWELL, the third shire town of Middlesex co., Mass., and the principal cotton manufacturing city of New England, situated on the Merrimack river, near the mouth of the Concord, 25 m. N. W. from Boston; pop. in 1850, 83,385; in 1855, 87,553; in 1860, 40,000. In rapidity of growth and prosperity Lowell has taken the lead among all the towns which the industrial enterprise of the eastern states has brought into existence during the past half century. The project of establishing a manufacturing interest at the point now occupied by Lowell was not suggested until long after a canal, now

used for distributing water power to various factories, had been built for the purpose of navigation around the Pawtucket falls in the Merrimack, which have a descent of 80 feet, by the locks and canals company, organized under a charter granted in 1792. In 1821 a tract of about 400 acres, in what is now the heart of Lowell, was purchased and laid out by several gentlemen who were subsequently incorporated as the Merrimack manufacturing company. The canal was enlarged, and a new one was constructed in 1847. The township, situated on both banks of the river, was taken from Dracut, Chelmsford, and Tewksbury, and embraces about 5 sq. m. The village of Belvidere, the most elegant portion of the town, was annexed to it after its original incorporation. The site of the city has many inequalities, but the streets are regularly laid out, and contain many elegant houses. There are two public squares; the one known as South square is large and beautifully ornamented. The following table shows the condition of the principal manufacturing establishments of Lowell:

Name of company.	Incorporated.	Capital.	Looms.	Spindles.	Operatives.	Consumed per week.		Yds. of cloth produced per week.
						Cotton, lbs.	Wool, lbs.	
Merrimack Manufacturing Company	1829	\$2,500,000	2,830	85,790	2,400	80,770		880,000
Hamilton " "	1825	1,200,000	1,823	48,513	1,250	80,000		285,000
Lowell " "	1828	600,000	700	18,990	520	60,000		150,000
Appleton Company	1828	2,000,000	454	15,066	1,200	55,000	66,000	117,000
Middlesex " "	1830	1,000,000	400	16,840	1,205		25,000	80,000
Suffolk Manufacturing Company	1830	600,000	800	21,986	680	60,000		154,000
Tremont Mills	1830	600,000	760	20,488	680	65,000		280,000
Lawrence Manufacturing Company	1830	1,500,000	1,852	58,694	1,600	140,000		260,000
Boott Cotton Mills	1825	1,300,000	1,685	54,886	1,183	90,000		800,000
Massachusetts Cotton Mills	1839	1,300,000	1,971	58,913	1,700	175,000		507,000
Total		\$18,000,000	12,284	899,064	12,507	805,770	91,000	2,463,000

Beside the total products above enumerated, consisting of 2,394,000 yards of cotton, 44,000 of wool, and 25,000 of carpeting, about 50 rugs are made per week. The Merrimack, Hamilton, Appleton, Suffolk, Tremont, Lawrence, Boott, and Massachusetts companies manufacture cotton goods; the Lowell, the same, and also carpets, rugs, and pantaloons stuffs; the Middlesex, broadcloths, doeskins, cassimeres, and shawls. The Lowell machine shop (incorporated in 1845, capital \$600,000, operatives 550) produces cotton machinery, locomotives, and the like, consuming 8,000 tons of wrought and cast iron per annum. The Lowell bleachery (incorporated in 1832, capital \$300,000, operatives 272) dyes 15,000,000 and bleaches 8,000,000 yards per annum. Of the 18,329 persons employed in all these establishments, 4,867 are males, and 8,962 females. The average weekly wages of females employed, above the cost of board, is represented to be \$2; of males, \$4.80. Each manufacturing company owns from 20 to 30 dwellings, which are leased at a nominal rent to responsible persons as boarding houses for the hands employed in the factories. Some of them are large enough to accommodate 40 or 50 inmates. None but operatives are allowed to board in them, and the sexes are kept separate. The

corporations also provide a hospital in which workpeople find attendance in sickness, for which, if they be unable to pay, the employers are responsible. Individual enterprise employs in various manufactures a capital of \$400,000, and about 1,500 persons. There are 6 banks of issue, having an aggregate capital of \$1,450,000; 8 savings banks, with deposits amounting to \$2,605,148, contributed by 12,192 depositors. There are, moreover, 2 loan and fund associations, and 3 insurance companies. Lowell has 20 churches (3 Baptist, 7 Congregational, 1 Episcopal, 1 Freewill Baptist, 3 Methodist, 3 Roman Catholic, and 2 Universalist). The Middlesex mechanics' association, having a library of 6,000 volumes, is the principal literary society of the town. A dispensary affords gratuitous medical aid to the poor. The educational system consists of one high, 8 grammar, 3 intermediate, 51 primary, and 2 free evening schools; the average actual attendance at these schools is 5,450; the whole number of scholars, 9,599. There is a city school library containing 10,000 volumes, to which access may be obtained by any citizen by the payment of a nominal annual assessment. In addition to those above named, there are several literary and benevolent associations of less importance. Of 40 newspapers which have existed

in Lowell in as many years, 4 are still continued. The city is connected with Boston by the Boston and Lowell railway, and with various points north by the Boston, Concord, and Montreal, and other lines, as well as with Lawrence, Salem, and Fitchburg by smaller lines of road. The government consists of a mayor, 8 aldermen, and 24 councilmen.

LOWELL, the name of a distinguished family of Massachusetts, descended from Percival Lowell, a merchant who emigrated from Bristol, England, in 1639, and settled in Newbury, where he died Jan. 8, 1665. I. JOHN, LL.D., an American statesman and jurist, born in Newburyport, Mass., June 17, 1743 (O. S.), died in Roxbury, Mass., May 6, 1802. He was the son of the Rev. John Lowell, the first minister of Newburyport, and was graduated at Harvard college in 1760. He studied law, was admitted to practice in 1762, represented Newburyport in the provincial assembly in 1776, and settled in Boston in 1777. He was elected to the convention which framed the constitution of Massachusetts in 1780, took a leading part in the deliberations of that body, and was a member of the committee by which the constitution was draughted and reported to the convention. He inserted in the bill of rights the clause declaring that "all men are born free and equal," for the purpose, as he avowed at the time, of abolishing slavery in Massachusetts; and after the adoption of the constitution he offered through the newspapers his services as a lawyer to any person held as a slave who desired to establish a right to freedom under that clause. The position maintained by him on this question was decided to be constitutional by the supreme court of the state in 1783, since which time slavery has had no legal existence in Massachusetts. In 1781 he was elected a member of the continental congress, and in 1782 was appointed by that body one of the 8 judges of the court for the trial of appeals from the courts of admiralty in the several states. In 1784 he was elected as one of the commissioners to establish the boundary between Massachusetts and New York. In 1789 President Washington appointed him judge of the district court of Massachusetts, and on the new organization of the U. S. courts in 1801 he was appointed by President Adams chief justice of the first circuit. He was one of the founders of the American academy, and for 18 years was a member of the corporation of Harvard college. II. JOHN, LL.D., an American lawyer and political writer, son of the preceding, born in Newburyport, Oct. 6, 1769, died in Boston, March 12, 1840. He was graduated at Harvard college in 1786, studied law, was admitted to the bar before he was 20 years of age, and rose rapidly to the highest rank in the profession. In 1803 he visited Europe, where he remained 8 years, and after his return devoted himself chiefly to politics. Though he always refused to accept office, few men of his day in Massachusetts had

so strong an influence on public opinion. After the decease of Fisher Ames in 1808, he exercised a greater ascendancy than any other person in New England over the minds of those who were opposed to the national administration. His writings in the newspapers and his pamphlets, of which he published 25, were of eminent service to the federal party by their skill and vigor. From 1810 to 1828 he was the leading member of the corporation of Harvard university. He was one of the founders of the Massachusetts general hospital, the Boston Athenæum, savings bank, and hospital life insurance company. For many years he was president of the Massachusetts agricultural society. He died suddenly of apoplexy, while reading a newspaper. "He possessed," says Edward Everett, "colloquial powers of the highest order, and a flow of unstudied eloquence never surpassed, and rarely, as with him, united with the command of an accurate, elegant, and logical pen. Next to his commanding talent and energy the great secret of his influence was his entire and unsuspected disinterestedness." III. FRANCIS CABOT, an American merchant, brother of the preceding, born in Newburyport, April 7, 1775, died in Boston, Sept. 2, 1817. In 1810 he visited England on account of the state of his health; and on his return home, shortly after the commencement of the war of 1812, he became so strongly convinced of the practicability of introducing the cotton manufacture into the United States that he proposed to his kinsman, P. T. Jackson, to make the experiment on an ample scale. (See JACKSON, PATRIOT TRACT.) The result of his project was the establishment of manufactures at Waltham, and the foundation of the city of Lowell, which was named after himself. He visited Washington in 1816, and his personal influence with Mr. Lowndes, Mr. Calhoun, and other leading members of congress, contributed largely to the introduction into the tariff act of that year of the protective clause which gave an impetus to the cotton manufacture in the United States. IV. JOHN, JR., founder of the Lowell institute at Boston, son of the preceding, born in Boston, May 11, 1799, died in Bombay, March 4, 1836. He received his early education at the Edinburgh high school, and entered Harvard college in 1816; but after two years' study, his health being impaired, he made in 1816 and 1817 two voyages to India, the first to Batavia, returning by Holland and England, and the second to Calcutta. After his return he engaged for a few years in commerce, but in 1830-'31 his wife and two daughters, his only children, died in the course of a few months, and for the rest of his life he devoted himself to travel, of which he was passionately fond. He spent one year in traversing the United States, and then visited in succession England, Scotland, Ireland, France, Belgium, Holland, Germany, Italy, Greece, the Mediterranean islands, Asia Minor, Egypt, the countries on the upper Nile, Arabia,

and Hindostan. His main object was to penetrate the Chinese empire from the Indian frontier. But he was prostrated by disease when he reached India, and died 3 weeks after his arrival. By his will, made while in Egypt amid the ruins of Thebes, he bequeathed about \$250,000 for the maintenance in Boston of annual courses of free public lectures on religion, science, literature, and the arts. The Lowell institute, as it is called, went into operation in 1839. It is highly successful, the annual issue of tickets to the lectures averaging 25,000. During the first 7 years after the foundation of the institute the lectures delivered numbered 561. Edward Everett delivered at Boston, Dec. 31, 1839, as an introduction to the first course of lectures of the Lowell institute, a memoir of Mr. Lowell, in which he said: "The few sentences, penned with a tired hand by our fellow citizen, on the top of a palace of the Pharaohs, will do more for human improvement than, for aught that appears, was done by all of that gloomy dynasty that ever reigned. I scruple not to affirm that in the directions given by him for a course of popular instruction, illustrative of the great truths of natural religion, and the evidences of Christianity, and unfolding the stores of natural science and useful knowledge, to be dispensed without restriction to an entire community, there is a better hope that mental activity will be profitably kindled, thought put in salutary motion, the connection of truth with the uses of life traced out, and the condition of man benefited, than in all the councils, rescripts, exploits, and institutions of Sesostris and his line." V. CHARLES, D.D., an American clergyman, son of Judge John Lowell, born in Boston, Aug. 15, 1782. He received his early education at Medford and at Andover academy, was graduated at Harvard college in 1800, and began the study of law in Boston, which he soon abandoned for that of theology. In 1802 he visited Europe and studied for two years at Edinburgh, and afterward travelled on the continent, returning to the United States in 1805. On Jan. 1, 1806, he was settled as minister of the West (Congregational) church in Boston, of which he is still pastor (1860). In 1837-'40 he travelled extensively in Europe and the East. Beside many occasional discourses, he has published two volumes of sermons (Boston, 1855.) VI. MARY (Mrs. PUTNAM), an American authoress, daughter of the preceding, born in Boston, Dec. 3, 1810. She was married, April 5, 1832, to Samuel R. Putnam, a merchant of Boston. Her mother, a native of New Hampshire, descended from the Scandinavian family of Trail or Troil of the Orkney islands, celebrated in Scott's "Pirate," possessed in an eminent degree the faculty of acquiring languages. Mrs. Putnam's attainments in the same direction are extraordinary, comprising not only Latin, Greek, and Hebrew, and the modern tongues of western Europe, but Swedish, Danish, Polish, Russian, Hungarian, Turkish, San-

scrit, and several other oriental languages. She has contributed many articles to the "North American Review," and to the "Christian Examiner;" and two of her articles in the latter journal (Nov. 1850, and March, 1851), in reply to Prof. Bowen's attacks on Kossuth and the other leaders of the Hungarian revolution of 1848-'9, attracted much attention, and had a marked influence on public opinion. In 1851 Mrs. Putnam went to Europe with her husband and children, where she resided, chiefly in France and Germany, till 1857, prosecuting her studies in languages and collecting materials for a history of Hungary, upon which she has been long engaged. VII. ROBERT TRAILL SPENCER, an American author, brother of the preceding, born in Boston, Oct. 8, 1816. He was educated at Round Hill school, Northampton, and at Harvard college, where he was graduated in 1838. He studied medicine and afterward theology, and in 1842 was ordained a clergyman of the church of England by the bishop of Newfoundland and Bermuda, whom he accompanied as chaplain first to Bermuda, and then to Newfoundland, where he was settled for some years as rector of Bay Robert. During a severe famine which prevailed in the island he was appointed commissioner for distributing food, became ill through overwork and anxiety, and returned to the United States. He soon after became rector of Christ church, Newark, N. J., and is now settled over Christ church in Duanesburg, N. Y. In 1858 he published at Boston a novel of Newfoundland life and scenery, "The New Priest in Conception Bay," and in 1860 "Fresh Hearts that failed 3,000 Years Ago, and other Poems." VIII. JAMES RUSSELL, an American poet, brother of the preceding, born in Cambridge, Mass., Feb. 22, 1819. He was graduated at Harvard college in 1838, and recited a "Class Poem," which was printed in 1839, and which contained many strokes of vigorous satire and much sharp wit. He studied law in Harvard university, was admitted to the bar in 1840, and opened an office in Boston. He soon, however, abandoned the profession and devoted himself entirely to literature. In 1841 he published a volume of poems entitled "A Year's Life," which has never been reprinted, though many of the poems, revised by the maturer taste and judgment of the author, have been incorporated into the subsequent collections of his writings. In Jan. 1843, he commenced, in conjunction with Robert Carter, the publication at Boston of "The Pioneer, a Literary and Critical Magazine," which the "Cyclopædia of American Literature" says "was of too fine a cast to be successful." Three monthly numbers were issued, containing articles from Poe, Neal, Hawthorne, Parsons, Story, and others, beside the editors, when the publishers, involved in debt by other publications, failed, and the magazine was discontinued. Mr. Lowell's next publication was a volume of "Poems" (Cambridge, 1844), comprising "A Legend of Brit-

tany," "Prometheus," "Rheucus," and numerous smaller pieces, among which were sonnets to Wendell Phillips and to J. R. Giddings, expressing decided anti-slavery sentiments. A volume of prose, entitled "Conversations on some of the Old Poets" (Cambridge, 1845), next appeared. It is a series of essays in the form of dialogues on Chaucer, Chapman, Ford, and poets and poetry in general, interspersed with remarks on politics, slavery, and other topics. A second series of his "Poems" (Cambridge, 1848) contained "The Present Crisis," "Anti-Texas," "On the Capture of certain Fugitive Slaves near Washington," and others which have obtained great popularity among the opponents of slavery. In the same year was published at Cambridge, in a thin volume, "The Vision of Sir Launfal," a poem founded upon the legend of the search for the Holy Graal, and the "Biglow Papers," a witty and humorous satire, consisting of various poems in the Yankee dialect, ostensibly by Mr. Hosea Biglow, and edited with an introduction, notes, glossary, index, and "notices of an independent press," by "Homer Wilbur, A.M., pastor of the first church in Jaalam, and prospective member of many literary, learned, and scientific societies." This satire was mainly directed against slavery and the war with Mexico in 1846-'7. It has passed through several editions in the United States, and has been twice reprinted in England. In 1848 also appeared anonymously "A Fable for the Critics," an ingenious rhymed essay upon the principal living American authors. In July, 1851, Mr. Lowell visited Europe, travelling in England, France, and Switzerland, and residing for a considerable period in Italy. He returned home in Dec. 1852. In the winter of 1854-'5 he delivered a course of 12 lectures on the British poets, which were received with applause by crowded audiences, and extensively reported in the newspapers. In Jan. 1855, on the resignation of Mr. Longfellow, he was appointed professor of modern languages and belles-lettres in Harvard college. To qualify himself more fully for the duties of the office, he went to Europe in May, 1855, and after spending a year in study, chiefly at Dresden, he returned home in Aug. 1856. Mr. Lowell has written much for the "North American Review," "Putnam's Monthly," the London "Daily News," the "National Anti-Slavery Standard," and other periodicals, and is now the editor of the "Atlantic Monthly." He is the author of the article on Dante in this cyclopædia. Several editions of his collected poems have appeared in this country, and 3 editions in England. The editor of one of the English editions, Andrew R. Scoble, says: "The tone of his compositions is singularly high-minded, vigorous, and pure. Many of his pieces impress us forcibly with the idea of great power, of imagination scattering its wealth with singular profuseness, and of a daring originality of conception. The descriptive power shown in

many of his poems is one of their most striking merits. His love of nature is genuine, his imagination is vivid, and his fancy fruitful in fine images. Some of his ideal portraits are exceedingly beautiful; for example, that of 'Irené.' No common hand could have drawn those gentle lineaments, and laid on those softly tinted colors. It shows a power of discerning and describing the retiring graces and reserved charms of womanhood not often found in a masculine intellect; and an appreciation of and reverence for the higher excellences of the female character which do honor to his moral sense and purity of taste." IX. MARIA (WHITE), an American poet, wife of the preceding, born in Watertown, Mass., July 8, 1821, died in Cambridge, Oct. 27, 1858. Her marriage with Mr. Lowell took place in 1844. She was singularly beautiful in person and character, and highly accomplished in languages and general literature. A volume of her poems, which are characterized chiefly by exquisite tenderness and simple delicacy, was privately printed in Cambridge in 1855.

LOWER EMPIRE. See BYZANTINE EMPIRE.

LOWNDES. I. A S. co. of Ga., bordering on Fla., and watered by the Withlacoochee and its branches; area, about 1,050 sq. m.; pop. in 1859, 4,140, of whom 1,948 were slaves. The surface is level, and the soil productive. In 1850 (since which its limits have been reduced) the productions were 233,569 bushels of Indian corn, 80,776 of sweet potatoes, 69,300 lbs. of rice, and 2,912 bales of cotton. There were 9 grist mills, 1 saw mill, 23 churches, and 509 pupils attending public schools. Capital, Troupville. II. A central co. of Ala., bordered on the N. by the Alabama river, and watered by its branches; area, 910 sq. m.; pop. in 1850, 21,915, of whom 14,649 were slaves. The surface is undulating, and the soil fertile. The productions in 1850 were 933,287 bushels of Indian corn, 163,505 of sweet potatoes, 161,155 lbs. of rice, and 23,872 bales of cotton. There were 36 churches, and 466 pupils attending schools. Capital, Haynesville. III. An E. co. of Miss., bordering on Ala., and intersected by the Tombigbee river; area, 569 sq. m.; pop. in 1850, 19,554, of whom 12,993 were slaves. The surface is undulating, and the soil a dark and very fertile loam. The productions in 1850 were 871,864 bushels of Indian corn, 98,418 of sweet potatoes, 5,850 lbs. of rice, and 15,127 bales of cotton. There were 17 grist mills, 9 saw mills, 4 tanneries, 24 churches, and 1,110 pupils attending schools. Capital, Columbus.

LOWNDES, RAWLINS, an American lawyer and statesman, born in the British West Indies in 1722, died in Charleston, S. C., Aug. 24, 1800. His parents settled when he was very young in Charleston, where he received his education, adopted the legal profession, and practised with great success. In 1766 he was appointed by the crown associate judge. Within 8 months he delivered the opinion of the majority of the court, but contrary to that

of the chief justice, in favor of the legality of public proceedings without the employment of stamped paper. This able and elaborate opinion illustrates the paramount necessity which legitimated the revolution, waives all consideration of the stamp act as a constitutional measure, and only argues from the common law with reference to the necessities of the case. In 1768 he moved a resolution in the assembly of South Carolina for the erection of a statue of William Pitt, in acknowledgment of that statesman's services to the colonies and the British constitution. The measure was carried, and the statue still remains in Charleston. In 1775 he was elected a member of the council of safety, and of the committee appointed under it. In 1776 he was one of a committee of 11 appointed to draft a constitution for the province, and subsequently a member of the legislative council created by the constitution. In 1778 he was elected president of the province, and gave his official assent to the new constitution. Savannah was soon captured by the British forces, Georgia succumbed, and South Carolina was threatened. Mr. Lowndes addressed himself with energy to the preparations for the enemy, but, having fewer than 10,000 men in the field, was unable to resist overwhelming forces by sea and land. Charleston soon shared the fate of Savannah, and he remained for some time a prisoner. He was subsequently a member of the assembly of South Carolina, when the federal constitution was submitted to the states for adoption. He strenuously opposed it, objecting to the restriction which it imposed upon the slave trade, which he declared to be the great source of the strength and prosperity of the South; to the clause giving power to congress to regulate commerce; and to the centralization of power which would accrue to the federal government from the general effect of the constitution, protesting that it would reduce the states to the condition of mere corporations, and give a dangerous dominance to the North. The earnestness of his opposition appears from the closing sentence of one of his speeches: "I wish for no other epitaph than this: 'Here lies one who opposed the federal constitution, holding it to be fatal to the liberties of his country.'" At the close of the debate the resolution was carried against him by only a single vote.—

WILLIAM JONES, son of the preceding, an American statesman, born in Charleston, S. C., Feb. 7, 1782, died at sea, Nov. 22, 1822. From his 7th till his 10th year he was educated in England. Returning to Charleston, he completed his preparatory studies under Dr. Gallagher, a Roman Catholic priest, was graduated at Charleston college, entered the law office of Chancellor De Saussure, and was admitted to the bar in 1804, having previously married Elizabeth, daughter of Gen. Thomas Pinckney. He soon abandoned his profession to attend to his plantation. In 1806 he was elected to the house of representatives in the general assembly of South Carolina, in which office he served

till in 1810 he was elected to the lower house of congress, where he continued till 1822, when his declining health compelled his resignation. He cooperated with the republican party of his time without being a partisan; was an urgent supporter of the war of 1812; reviewed the conduct of Jackson in the Seminole war; and spoke frequently on matters pertaining to the army, the navy, the finances, the national bank, the Missouri compromise, the Spanish treaty, and the tariff. He was chairman of the committee on ways and means from 1818 to 1822. His friends regarded him as the most proper person for the highest dignity in the country. The summer of 1820 he passed in Europe; that of 1821 in the low country of South Carolina, where he contracted the malarious disease of the climate, which impaired his constitution. His physicians prescribed a voyage to Europe, and he died on the passage.

LOWTH, WILLIAM, an English clergyman and author, born in London in 1661, died in Buriton, Hampshire, in 1782. He was graduated at Oxford in 1688, where he distinguished himself by his attainments as a biblical scholar. After leaving the university he became chaplain to Dr. Mew, bishop of Winchester, who in 1696 conferred on him a prebend in his own cathedral, and in 1699 presented him to the living of Buriton, which he retained till his death. He contributed many valuable notes to Potter's "Clemens Alexandrinus," Hudson's "Josephus," and Reading's "Ecclesiastical Historians." The principal of his own works are: "A Vindication of the Divine Authority and Inspiration of the Old and New Testaments" (Oxford, 1692); "Directions for the Profitable Reading of the Holy Scriptures" (London, 1708); and "Commentaries on the Prophets" (1725).—**ROBERT, D.D.**, son of the preceding, born in Buriton, Nov. 28, 1710, died in Fulham, near London, Nov. 3, 1787. He was graduated at New college, Oxford, in 1737, and in 1741 succeeded Mr. Spence as professor of poetry there, in which capacity he delivered a course of lectures on the "Sacred Poetry of the Hebrews." In 1744 Bishop Hoadley presented him to the living of Ovington, Hampshire. In 1748-'9 he travelled on the continent with Mr. Legge, afterward chancellor of the exchequer, and Lords George and Frederic Cavendish, brothers of the duke of Devonshire. In 1750 he was made archdeacon of Winchester, and in 1753 rector of East Woodhay in Hampshire, and in 1755 he accompanied the duke of Devonshire, lord lieutenant, to Ireland as chaplain. He was nominated by his patron to the see of Limerick, but declined it for the prebend of Durham and rectory of Sedgfield. In 1766 he was raised to the bishopric of St. David's. He was translated to Oxford in the same year, and to London in 1777. On the death of Archbishop Cornwallis in 1783, George III. offered Dr. Lowth the primacy of Canterbury, but in consequence of infirm

health he declined it. His most important works are: *Prælectiones de Sacra Poesi Hebræorum* (Oxford, 1758); "Life of William of Wykeham" (1758; 2d ed., 1759); "English Grammar" (1762); and a metrical "Translation of Isaiah" (1778), which is his greatest production. The 13th edition of this version appeared in London in 1842.

LOXA. See LOJA.

LOYD, LEWIS, a London banker, born Jan. 1, 1768, died at Overstone park, Northamptonshire, May 13, 1858. He was the eldest son of Mr. William Loyd, and in the early part of his life officiated as pastor of a small dissenting chapel at Manchester. Having married in 1798 the only daughter of Mr. John Jones, a wealthy merchant of that city, he entered into partnership with his father-in-law, and afterward established a branch house in London, under the firm of Jones, Loyd, and co., which has since become one of the leading banking establishments of England. Its prosperity is chiefly due to the energy, industry, and intelligence of Mr. Loyd, who was for a long time a ruling spirit of the financial world of London. By his first wife he left an only son and heir, Samuel Jones Loyd, who was raised in 1850 to the peerage under the title of Baron Overstone.

LOYOLA, SAINT IGNATIUS DE, founder of the society of Jesus, born at the castle of Loyola, near Azcoytia, Guipuzcoa, Spain, in 1491, died in Rome, July 31, 1556. His true name was Don Inigo Lopez de Recalde de Loyola. He was the youngest of 11 children born to Don Bertram, lord of Oñez and Loyola, and Doña Maria Saez de Balde his wife. At the age of 14 he was sent to the court of Ferdinand and Isabella as page to the king, whom he accompanied in his wars against the Portuguese, the Navarrais, the French, and the Moors, displaying a valor and capacity which soon raised him to the height of reputation. His gallantry and courtly bearing were equal to his bravery, and the young soldier seemed destined for a brilliant position in the world when a wound in the leg, received while heroically defending the city of Pampeluna against the French in 1521, left him a prisoner and a cripple. The reading of certain lives of the saints during his long convalescence turned his thoughts toward a religious life. As soon as his health was restored, having regained his liberty, he made a pilgrimage to the famous monastery of Montserrat near Barcelona, changed clothes with a beggar, and concealing his name and rank passed 10 months at the little village of Manresa, part of the time in the solitude of a cave, and part engaged in the most loathsome offices at a hospital. Long fasts, scourgings, and other self-imposed penances frequently brought him near to death. Early in 1528 he set out on a pilgrimage to Jerusalem, journeying much of the way on foot, and depending upon the charity of chance passers for his daily food. He visited the holy places, and the next year saw him at Barcelona

in a public school, striving with infinite labor to master the Latin grammar at the age of 33. He had already formed the design of collecting a body of companions to labor in some way for the good of religion, and when in 1526 he went from Barcelona to the university of Alcala he was followed by a few friends bent upon imitating his mode of life. They wore a plain gray habit; they lived by begging; and whatever time they could spare from study was spent in exhortation and attendance at the hospitals. The preachings of Luther and the doctrines of the Alombrados about this time had filled Spain with alarm alike at religious novelties and at all secret gatherings. Ignatius was cast into prison, and though his trial, as one of his biographers relates, "appeared more likely to lead to his canonization than to his condemnation as a criminal," he was forbidden to preach and ordered to put off his peculiar garb. At Salamanca, whither he then removed, he was treated with still more severity, but finally dismissed with honor, though with such restrictions upon his freedom to preach that he resolved to go to France, and arrived in Paris in Feb. 1528. His companions had one by one forsaken him, but here at the university he found new friends who were to be the earliest members of the society of Jesus. The first was a young ecclesiastic, Pierre LeFebvre, or Peter Faber; the second, Francis Xavier. James Laynez, Alphonso Salmeron, Nicholas Bobadilla, and Simon Rodriguez joined him soon afterward. In July, 1534, he assembled these 6 disciples, and laid before them his plan for founding a new missionary order, to labor especially in Palestine. The proposal was received with enthusiasm. It was resolved that the associates should remain in Paris until all had completed their studies, and if within a year after that time no opportunity occurred of reaching the Holy Land, they should offer their services to the pope. On the feast of the Assumption (Aug. 15) they took their vows at the chapel of Our Lady of Montmartre, near Paris, adding to the usual obligations of poverty and chastity two others, of visiting the Holy Land and obedience to the pope. They continued to live apart from one another, but followed a certain rule of life which Ignatius marked out for them. They were accused of heresy, but an examination by the inquisition resulted in their triumphant acquittal. Soon afterward Ignatius was induced by failing health to revisit his native province, where his humility was severely wounded by the anxiety of the people to do him the honor proper to a saint. He preferred to employ himself in the hospitals, to live by alms, to sleep upon a bare board, and to preach to the multitude; and the entreaties of his relatives could only induce him to enter his paternal castle for one night. After passing through some other parts of Spain he took ship at Valencia, landed at Genoa, and journeyed on foot to Venice, where he arrived toward the close of 1535. In

Jan. 1537, he was joined by his associates, now increased to 9 in number, and after a few months of labor in the hospitals the whole party with the exception of Ignatius went to Rome, received the pope's blessing on their undertaking, and then returned to Venice with permission for all of their number who were not already priests to be raised at once to that order. Ignatius however deferred his own ordination until Christmas day, 1538. In the mean time the prescribed period of a year had elapsed, and the continuance of war between the emperor and the sultan was still an insuperable obstacle to their intended voyage to Palestine. Ignatius assembled his disciples, and having prescribed for them a rule of life, and given them the name by which they have ever since been known, set out with two companions for Rome, and unfolded his plans to Pope Paul III. After much difficulty a bull for the establishment of the new order was granted, Sept. 27, 1540. In the following spring a meeting of the members was held at Rome, and Ignatius was unanimously chosen general. Immediately afterward they made their solemn religious profession at a church outside the walls, and Ignatius, having fixed his residence at Rome, then applied himself to the final elaboration of the constitution, of which as yet only a sketch had been drawn up. His subsequent history is that of his order. Beside the common labors of benevolence in which he had been so long engaged, he founded at Rome a number of charitable institutions, among which were a house for Jewish catechumens, a college for German youth, an asylum for penitent women and poor girls who were exposed to great temptation, and a foundling hospital. For many years his life had been a perpetual sickness, and for some time previous to his death he was able to take little share in the details of government. At the repeated request of his companions he left in writing an account of his early life and conversion. He died alone in his room, and after a long interregnum was succeeded in the generalship of the order by James Laynez.—Ignatius was of middling stature, majestic air, and noble countenance, but slightly lame owing to his wound at Pampeluna. He is often described as a fiery enthusiast, but nothing could be further from the truth. Though by nature of an ardent temperament, his actions were so entirely under his control that during his life he was commonly thought cold and phlegmatic. His outward bearing gave no sign of the religious zeal which burned in his heart. Obedience, humility, and a resignation amounting to indifference, were among the virtues which he most loved to inculcate. He was content, so long as he had not the interests of his disciples to consult, to pass for a fool and a madman; he imitated the speech and manners of the beggars whom he served in the hospitals; he was never so well pleased as when loaded with insults; he avoided all places where he might

be recognized as a nobleman or honored as a saint; but he lost no opportunity of freeing his character from such aspirations as could affect the prosperity of his order. His early military education had impressed upon his character a firmness and generosity of temper which he always retained. Hence he constituted his order somewhat according to military rules, but in his personal intercourse with his disciples he displayed a paternal tenderness, and in governing and framing rules for the society he showed a prudence which has never ceased to excite the admiration of those who have least sympathy with his principles. The best monument of Ignatius, if we except the society of Jesus itself, is the book of "Spiritual Exercises" which he composed in his solitude at Manresa. It comprises a series of meditations for the use not only of religious but of persons in the world. The "Exercises" may be said to lie at the foundation of the order. The vocation of every novice is tested by them; the first members performed them; and they were the ground of many of the persecutions to which their author was subjected. "The object which he proposed and attained," says Bartoli, "was to reduce the cure of the soul to an art, by basing upon certain principles of faith an exact and perfect method, which, practised by the application of the means prescribed by him, is almost infallibly successful." The book of exercises has been translated into Latin, French, and English, and often reprinted. Ignatius was beatified by Pope Paul V. in 1607, and canonized by Gregory XV. in 1622. His festival is kept on July 31. Among the numerous biographies of him are those of Ribadeneira, *Vida de S. Ignacio* (Madrid, 1570); Maffei, *De Vita et Moribus S. Ignatii Loyola* (Rome, 1584); Gretser, *Apoloogia pro Vita S. Ignatii* (8 vols. 8vo., Ingolstadt, 1599, 1601, 1604); Michael Walpole, "Life of St. Ignatius" (St. Omer, 1617); Bartoli, *De Vita S. Ignatii* (fol., Rome, 1650; English translation, 2 vols. 12mo., New York, 1855); Bonhours, *Vie de S. Ignace* (Paris, 1679); Genelli, *Leben des heiligen Ignatius von Loyola* (8vo., Innsbruck, 1848).

LOZERE, a S. department of France, in the old province of Languedoc, bounded by the departments of Cantal, Haute-Loire, Ardèche, Gard, and Aveyron; area, 1,965 sq. m.; pop. in 1856, 140,819. Its surface is mountainous, being traversed by various chains and spurs of the Cévennes, the principal of which are the plateau of the Palais du Roi, 5,077 feet high, the Margeride, 4,982 feet, and the Lozère, (from which the department derives its name), 4,887 feet. The chains divide the department into 3 districts. The soil is poor, and the climate severe. Three considerable rivers, the Allier, Lot, and Tarn, have their sources in the mountains of this department. Manufactures and trade are of little importance. Lead, iron, antimony, and other minerals are mined, and sheep extensively reared. Capital, Mende.

LUBBOCK, SIR JOHN WILLIAM, an English

astronomer, born in London, March 26, 1808. He was graduated at Trinity college, Cambridge, in 1825. His life has been devoted to scientific labors, and he is the author of numerous papers in the "Memoirs of the Royal Astronomical Society," and in the "Philosophical Transactions of the Royal Society." Of the latter body he was for 12 years treasurer and vice-president. Of these papers, an important series on the planetary and lunar theory have been published as a separate work under the title, "On the Theory of the Moon and on the Perturbations of the Planets" (8vo., 1833; 2d ed. enlarged, 1834-'6). Between 1831 and 1837 he contributed to the "Philosophical Transactions" a number of papers on the tides in the ports of London and Liverpool, for which the royal society bestowed upon him their medal on physics. He also edited the maps of the stars published by the society for the diffusion of useful knowledge, and has published "Computation of Eclipses," and "Classification of the different Branches of Human Knowledge," of which 2 editions have appeared, beside other writings.

LÜBECK, one of the 4 free cities of Germany, situated in lat. 53° 51' N., long. 10° 50' E., on a ridge between the rivers Trave and Wakenitz, 29 m. by railway N. E. from Hamburg, and 145 m. N. W. from Berlin; area of the city and its territory, 110 sq. m.; pop. of Lübeck proper and its suburbs in 1858, 80,715; of 52 villages and 32 hamlets scattered around in neighboring principalities, 12,508; of the bailiwick of Bergedorf, part of the Vierlanden district, which the city holds in common with Hamburg, 12,198; total, 55,421. The city has a cathedral remarkable for its wood carvings and paintings by Memling, and the church of St. Mary, one of the finest pointed Gothic edifices in N. Germany, containing pictures by Holbein, Vandyke, and other great masters. Conspicuous among the other public buildings is the shipowners' guild, and particularly the town hall or *Rathhaus*, with the famous ancient hall of the Hansa, in which the deputies from 85 cities used to meet, and in the lower story of which the senate still assembles. The Holstein and Burg gates are also objects of architectural interest, as well as the hospital of the Holy Ghost, which is the principal of the many charitable institutions of the city. The chief educational establishment is the gymnasium. The size of the ramparts, now converted into public walks, and the quaint architecture and rich decoration of many of the houses, bear witness to the former importance and prosperity of the city, which it retains to some degree, the supreme court of all the free cities of Germany being still held at Lübeck, and its commerce continuing to be of magnitude, notwithstanding the proximity to and the competition of Hamburg and Bremen. Still it has considerably declined compared with the times when the Hanse towns monopolized the traffic of Europe. The registered shipping comprised in

1858 nearly 70 sailing and steam vessels; in the foreign trade there were 940 entrances and 959 clearances, and in the coasting trade 500 vessels. One third of the imports come by land and river from Hamburg; the remainder by sea, even large vessels, which formerly had to discharge at Travemünde, being, through recent enlargements of the port, now able to come to the city. The chief imports are cotton, silk goods, hardware, and other manufactures, colonial articles, dye stuffs, zinc, &c. The exports consist mainly of corn, cattle, wool, timber, iron, and fish. The principal manufactures are tobacco, soap, paper, playing cards, linen and cotton goods, and iron. Lübeck possesses an exchange, a commercial school, and many large insurance companies, the fire insurance company annually insuring property to the amount of 25,000,000 marks. Many business transactions are carried on with Russia and Scandinavia, large steamers plying between Lübeck and Copenhagen, Stockholm, and St. Petersburg. Lübeck has a republican form of government, administered by a senate of 20 life members, and by 120 delegates elected for 6 years. The expenditures and receipts in 1859 were respectively about 1,100,000 marks; the public debt amounts to about 12,000,000, including a new railway loan of 8,000,000. The decimal system of currency has been in operation since 1857.—Lübeck was founded, near the site of a more ancient Slavic town of the same name which had been destroyed, in the first half of the 12th century, by Adolphus II., count of Holstein, and ceded by him in 1158 to Henry the Lion, who greatly increased the prosperity of the city, and gave it the celebrated code of laws known as *Das Lübsche Recht*. The emperor Frederic II. conferred upon it in 1226 the privileges of an imperial free city. After that time, and especially after joining the Hanseatic league, Lübeck became a place of great commercial magnitude and political importance as the capital of the Hanse towns, and from the great enterprise of its citizens. During the 30 years' war it lost its prestige, and during the wars of Napoleon it was subjected to many vicissitudes, from which it has since greatly recovered.

LUBLIN, a government of Russian Poland, bounded N. and E. by the Bug, S. by Austrian Galicia, and W. by the Vistula; area about 12,000 sq. m.; pop. about 1,000,000. The interior is traversed by the Wieprz, which flows into the Vistula near Pulawy. The surface is level, and the soil fertile.—LUBLIN, the capital, is situated on the Bistrzyca, an affluent of the Wieprz; pop. 16,000, a large part of whom are Jews. It is divided into the old and new towns, and has numerous public buildings and churches. It is the most important commercial town of the kingdom after Warsaw, and has also some woollen and linen manufactures.

LUBRICANT (Lat. *lubricus*, slippery), a substance usually of an oily nature, applied to

machinery in order to facilitate its movements and protect it from wear. Beside oils and grease, tar is used for wheels of carriages, and pulverized soapstone for the journals of heavy wheels. Graphite also is applied to the same use, for which it is adapted, forming a hard smooth surface like that of polished metal. In large manufacturing establishments the selection of proper lubricants is always a matter of especial care. The chief requisites are sufficient body, so that the material shall not be thrown out by the movement of the machinery, and at the same time permanent fluidity while the material is in contact with metallic surfaces, and exposed to the air. Some oils soon become gummy, and then retard the movements they are intended to facilitate. In a mill running 50,000 spindles at the rate of 4,000 or 5,000 revolutions in a minute, a slight increase of viscosity in the oil used as a lubricant is immediately felt in a demand for additional power to keep up the motion. Even the greater fluidity given to the oil by the increased temperature caused by lighting the gas at night makes a difference of several horse-powers in the duty of an engine of a large establishment. For delicate works designed to keep in motion it may be several years, as of watches, oils are especially prepared by processes often kept secret, and the preparations are sold to the watchmakers at very high prices. For larger machines sperm oil is the lubricant commonly esteemed the best, and in England the oil of rape seed is extensively used. Most other oils become more or less gummy, or have too little body. The latter is the defect of coal oils; but although these cannot be used alone, the heavier portions after the lighter have been distilled off answer an excellent purpose mixed with lard oil, sometimes in the proportion of 50 per cent., and are thus largely employed at the West. The lighter portions stand at about 40° of Baumé's scale, and the heavier from 23° to 25°. An oil is prepared at Hammondsville, Jefferson co., Ohio, from bituminous coal, which is unusually heavy, standing at 12° B., equivalent to a specific gravity of .99. It is not adapted for illuminating purposes, but is found to be a good lubricant for car wheel axles. The heavier kinds of natural coal oils promise well as lubricants; in common with the other oils of this class, they have the property of dissolving the gum produced by other oils, and hence are advantageously mixed with them.—The relative qualities of lubricating oils are tested by a method proposed by Mr. Nasmyth. A plate of iron 6 feet long, provided with a number of longitudinal grooves of equal size, is placed so that one end is an inch higher than the other. An equal sample of each of the oils to be compared is poured at the same time into the upper end of each of these grooves, and they are left to flow toward the lower end. Some oils, which for the first 2 or 3 days appear to be most fluid, and make the furthest progress, begin to coagulate, and are passed by

the better oils, some of which continue the race 8 or 10 days. In the trials made by Mr. Nasmyth, linseed oil flowed freely for one day, but stopped in the space of 18 inches. The best sperm oil flowed most freely for 2 days, but the 8d day was passed by common sperm oil, which on the 9th day reached within 2 inches of the foot of the plane, the best sperm having stopped on the 7th day at 4 feet 6½ inches. M. W. Artus, noticing the tendency of oils to gradually decompose and oxidize the metals they come in contact with, was led to try for watch work and other metallic apparatus mixtures of the hydrocarbons, extracted by the distillation of mineral coal. To deprive them of their disagreeable odor, he caused them to be purified by agitating them with a saturated solution of hypochlorite of soda, and then leaving them for some time to repose. The oil that swims upon the surface being removed, they are agitated anew with lime water. When clear they are decanted, then mixed with a concentrated solution of soda in the proportion of ½, and then are rectified. The success of the trials induced the publication of the process for the benefit of those requiring this lubricant.

LUCA GIORDANO. See GIORDANO.

LUCAN, GEORGE CHARLES BINGHAM, earl of, a British general, born in London, April 16, 1800. His mother, before her marriage with his father Richard, 2d earl of Lucan, had been the wife of Bernard Edward Howard, afterward duke of Norfolk, from whom she was divorced by act of parliament in 1794. He was educated at Westminster, and entered the army in 1816. In 1828 he joined the Russian general Diebitsch as a volunteer in the campaign against Turkey, after which the order of the knights of St. Anne (2d class) was conferred upon him by the czar Nicholas. In 1829 he proceeded with Diebitsch across the Balkan, as commander of a division of the Russian cavalry, which he brought back in good order before the walls of Adrianople, where a treaty of peace with the Turks was concluded, Sept. 14, 1829. He then returned to England, and retired from the army on half pay in 1836. In 1839 he succeeded to his title and property, the great bulk of which is in the county of Mayo, Ireland, beside a large estate between Staines and Chertsey, in Surrey, England. He devoted himself to the improvement of his Irish property, and rescued within a short time nearly 80,000 acres from a tenantry steeped in misery, but the summary ejection of whom subjected him to great odium, and was much commented upon in the London "Times" and other newspapers. The duke of Wellington had great regard for his judgment on cavalry matters; and although he had previous to this time not taken a prominent position in the army, on the outbreak of the war of 1854 he was appointed commander of the cavalry in the Crimea, with the rank of lieutenant-general, his brother-in-law, the earl of Cardigan, being commander of the light brigade

of cavalry. He was wounded before Sebastopol, but his name is most conspicuously associated with the celebrated cavalry charge at Balaklava (Oct. 25, 1854), the order for which was transmitted from Lord Raglan through Lord Lucan to Lord Cardigan. He was created in 1856 commander of the French legion of honor for his services in the Crimea; but his conduct, together with that of Cardigan, was made the subject of an investigation by the Crimean board of inquiry, which however did not result in any incrimination of either of them. Among other strictures on the Crimean report, was one published by the London "Daily News," July 26, 1856, in which the two earls were handled with great severity; in that article it was said that "the Lucan-Cardigan scandal still remains undiminished in real gravity," and that "the first duty of the commander-in-chief now is to introduce into the service a deeper sense of responsibility, a more earnest sense of duty, than the truculent insubordination of the two white-washed peers." This led to an action for libel brought by Lucan against the proprietors of that journal, but on the trial (Dec. 5, 1856) the verdict was given for the defendants. The earl of Lucan is a member of the house of lords as a representative peer of Ireland, and is a conservative in politics.

LUCAN (MARCUS ANNÆUS LUCANUS), a Roman poet, born in Corduba (Cordova) in Spain, A. D. 39, died in 65. His father was of equestrian rank, a brother of the philosopher Seneca, and carried his son at an early age to Rome, where he was educated under the best masters. His talents were soon generally noticed, and his public recitations were so much admired that he was forbidden by Nero to continue them. This prohibition caused him to engage in the conspiracy of Piso, in which he was betrayed. An offer of pardon induced him after some hesitation to turn informer; but after denouncing his accomplices, among whom was his mother Acilia, his own death was ordered by the emperor. Finding escape hopeless, he caused his veins to be opened, and died while repeating some of his own verses descriptive of this mode of death. His only extant production is the heroic poem *Pharsalia*, in 10 books, the subject of which is the struggle between Cæsar and Pompey, which was decided by the battle of that name. The 10th book is incomplete, the narrative terminating abruptly. The different spirit pervading different parts, changing from flatteries of Nero to fierce invectives against tyranny, proves that it was composed at intervals. It reveals much poetical power, but has great defects, and has often been both admired and condemned with exaggeration. The best edition is that of Weber (Leipsic, 1821-'31). The principal English translations are by Christopher Marlowe (of the first book, 1600), May (1627), Rowe (1718), and Riley, in "Bohn's Classical Library" (1853).

LUCANIA, in ancient geography, a division of southern Italy or Magna Græcia, bounded

N. W. by Campania, from which it was partly separated by the river Silarus (now Salò), N. by Samnium, N. E. by Apulia, from which it was separated by the Bradanus (Bradano), E. by the Tarentine gulf, S. by Bruttium, and W. by the Tyrrhenian sea. The territory is now entirely included in the kingdom of Naples. It is mountainous, excepting a fertile and extensive plain between the Apennines and the gulf of Taranto. Beside the rivers above mentioned, it was watered by the Tanager (Negro), an affluent of the Silarus, the Laus (Lao), which falls into the Tyrrhenian sea on the confines of Bruttium, the Siris (Sinno) and the Sybaris (Cosile), which flow into the Tarentine gulf, near the towns of the same names, and other numerous streams. Among the principal towns, though flourishing at various periods, were Metapontum, Heraclea, Sybaris, and Thurium or Thurii on the eastern coast, Posidonium or Pastum and Elea or Velia on the western, and Pandosia and Potentia in the interior. The original inhabitants of Lucania were the Chones and Enotrians, who, like most of the Greeks who settled on the coasts, were gradually subdued by Samnites from the N., who in their turn were subdued by the Romans in the earlier part of the 3d century B. C. Lucania toward the close of the same century became a principal seat of the 2d Punic war, which for ever destroyed its former prosperity.

LUCAS. I. A N. W. co. of Ohio, bordering on Mich. and Lake Erie, bounded partly on the S. by the Maumee river, and drained by the Ottawa and Swan creek; area, 420 sq. m.; pop. in 1850, 12,263. It has a level surface and fertile soil. The productions in 1850 were 51,914 bushels of wheat, 118,947 of Indian corn, 37,427 of oats, and 20,321 lbs. of wool. There were 7 flouring mills, 10 saw mills, 4 iron foundries, 2 woollen factories, 3 tanneries, 13 churches, and 5,122 pupils attending public schools. Capital, Maumee City. II. A S. co. of Iowa, drained by branches of the Chariton and Des Moines rivers; area, 432 sq. m.; pop. in 1859, 5,287. The surface is rolling, with prairies and forests, and the soil generally fertile. The productions in 1859 were 5,379 bushels of wheat, 191,208 of Indian corn, 5,537 of potatoes, 6,591 tons of hay, and 3,019 galls. of molasses from sorghum. Capital, Polk.

LUCAS, FREDERIC, an English journalist, born in London, March 30, 1812, died in Staines, Middlesex, Oct. 23, 1855. His family on both sides belonged to the society of Friends. His education was commenced at a school kept by a member of that society at Darlington, and continued at the London university, where he remained 3 years. He then entered the chambers of a conveyancer, and kept his terms at the Middle Temple. In 1835 he began the practice of law, in which he had good success. Four years later he entered the Roman Catholic church, and published a pamphlet entitled "Reasons for becoming a Roman Catholic," addressed to the society of Friends. It is a

very clear and vigorous exposition of the motives which induced him to take so important a step. He founded at London the "Tablet," a newspaper since widely known as an advocate and exponent of Catholic views, and contributed to the "Dublin Review." In 1849 he transferred the "Tablet" to Dublin, and in 1852 was returned to parliament by the county of Meath.

LUCCA, an Italian territory, successively an independent republic, duchy, and province of Tuscany, and since March, 1860, forming part of Sardinia, bounded N. by Modena, E. and S. by Tuscany, and W. by the Mediterranean; area in 1854, 512 sq. m.; pop. 261,000. It is divided into the mountainous districts among the Apennines, including the valley of the Linsa; the valley of the Serchio, comprising the fine and highly cultivated plain of Lucca; and the flats near the sea, in part marshy, but producing good pasture.—LUCCA, the chief city of the above territory, is situated in a fertile and beautiful valley, surrounded by hills and watered by the Serchio, 12 m. N. E. by railway from Pisa and 49 m. W. from Florence; pop. about 26,000. The streets are well paved. The principal squares are the Piazza Ducale, Piazza S. Michele, and the Piazza del Mercato. The last, which is the most remarkable, and in which the market has been held since 1839, occupies the site and preserves the form of the ancient amphitheatre, which had 2 stories of 54 arches each, and could accommodate with seats nearly 11,000 spectators. The chief public buildings are the town house, the public library, the ducal palace, the Palazzo Pretorio, the Palazzo Mansi and the Palazzo Borghi (now used as a pauper asylum), with the so called Scaligerian castle and a lofty tower adjoining it, this palace as well as some others of Lucca having been originally intended for purposes of defence as well as for habitation and state. There are nearly 40 churches. The cathedral, dedicated to St. Martin, is of the 11th century, with archiepiscopal archives abounding in ancient historical documents, adorned with paintings by Tintoretto and other masters, with statuary and other works of art by Olivitali and various eminent sculptors, and with a memorial known as the "altar of Liberty;" a small chapel near the altar contains an ancient crucifix carved of cedar wood, famous as a miraculous relic. Lucca possesses an academy of letters and sciences founded in 1817, and a number of educational and charitable institutions. Silk was introduced from Sicily into Lucca, the first place where it was produced and manufactured, and which in the beginning of the 14th century, according to Gibbon, enjoyed a lucrative monopoly of this industry, which, though diminished, continues to be carried on. The trade in raw silk, however, is still important, and it constitutes, together with oil, the staple product of the country. Cotton, wool, and cloth manufactures contribute also to the industrial activity of Lucca; and the neighbor-

ing seaport Viareggio is the chief place of export for Carrara marble.—The road to the celebrated baths of Lucca (about 14 m. from the city) is lined with picturesque villages, the principal of which, Ponte a Seraglio, occupies a central position between the Bagni Caldi and Bagni alla Villa, and contains a post office, a casino, an English book club, and many hotels, houses, and shops. The Bagni Caldi consist of two warm springs, in one of which the thermometer stands at 180°, and which has a larger proportion of salt than the other springs. The Bagni alla Villa have a spring of about 100°. The other baths are those of San Giovanni, with 2 springs of 98°, Dozze Basse of 15 springs varying between 96° and 110°, and Barnabo, with a spring of 102°. The springs contain sulphates and muriates of lime and of magnesia, but chiefly sulphate of lime. The waters are beneficial for cutaneous and kindred diseases, and, the valley in which the baths of Lucca are situated being one of the finest and the coolest in Italy, they are a favorite summer resort, and contain many fine villas.—Lucca (anc. *Luca*) belonged to the Etruscans previous to becoming a Roman colony. In the middle ages it was a republic, often in conflict with Pisa and Florence, for some time siding with the former city at the head of the Ghibellines. Subsequently it fell into the hands of the Visconti of Milan; and after having been liberated from their yoke by the emperor Charles IV. in the latter part of the 14th century, it again became the prey of several petty tyrants, and eventually recovered its independence and formed a government, ruled by a small and narrow-minded aristocracy. An attempt to establish a more popular government made by the gonfaloniere Burlamacchi toward the middle of the 16th century failed, and its instigator was put to death. The Martinian law passed soon afterward, and so called after its author, the gonfaloniere Martino Bernardini, established a close form of aristocratic government resembling that of Venice, only a certain number of families being made eligible to office. These privileged families furnished the executive (*signoria*), consisting of 9 elders (*anziani*), a *gonfaloniere* (chief magistrate), a senate of 36 members, and a great council of 90. The number of these favored families decreased from about 150 in 1600 to about 80 in 1797, when Lucca was seized by the French, with whose support the democratic party abolished the Martinian law, and organized a new form of government administered by 2 councils and a directory. In 1805 Lucca was given by Napoleon as a principality to his sister Elisa Baciocchi. After his fall it was occupied by Austria, and complications arose as to the future sovereignty of Lucca and Parma, there being two claimants, one Maria Louisa, ex-empress of Napoleon, and the other the Spanish infanta Maria Louisa, widow of Louis of Parma, for some time king of Etruria (Tuscany). Parma was allotted to the former, but to revert after

her death to the latter, who in the meanwhile was invested with the regency of Lucca, which however was to revert to Tuscany as soon as the death of the Austrian Maria Louisa had reinstated the Spanish Maria Louisa and her son upon the throne of Parma. The latter princess was succeeded, March 13, 1824, by her son Charles Louis, who had married in 1820 a daughter of the Sardinian king, Charles Albert. This prince spent most of his time abroad. Ward (died in 1858), an English groom who left Yorkshire as a boy in the pay of Prince Liechtenstein, and spent some years as a jockey in Vienna, ingratiated himself with the duke of Lucca, who promoted him from the stable to his household as valet, which service he performed up to 1846, when he was made master of the horse. Eventually he officiated as minister of the household and minister of finance, and was the ruling spirit of the duchy, until the abdication of the duke in 1848, afterward joining the service of the duke of Parma. Shortly after the outbreak of the Italian movement in 1847, the duke ceded Lucca (with the exception of some minor parts reverting to Modena and Parma) to Tuscany, to which it was officially annexed (Oct. 11, 1847) about two months previous to the time when it naturally must have been allotted to that country in consequence of the death of Napoleon's widow Maria Louisa, which, by vacating the throne of Parma for the Spanish family, terminated their rule in Lucca. It remained a province of the grand duchy of Tuscany until March, 1860, when, together with that part of Italy, it was annexed to Sardinia.

LUCCHESINI, GIROLAMO, marquis of, a Prussian statesman, born in Lucca in 1752, died in Florence, Oct. 19, 1825. He was descended from a patrician family of Lucca. Being introduced through the abbé Fontana to Frederic II. of Prussia, he was employed by that monarch as librarian and reader. Afterward he officiated in diplomatic capacities for the Prussian court in Rome and Warsaw. Schlosser says: "This minister, who afterward, in connection with Lombard and Haugwitz, formed the triumvirate of the cabinet of Berlin, which proved so injurious to Germany, and finally to Prussia herself, then (about 1790) put in practice his genuine Italian diplomatic arts in Warsaw." He succeeded that year in concluding an alliance between the former power and Poland, but labored two years afterward as assiduously in subverting the alliance as he had in effecting it. From 1798 to 1797 he was ambassador in Vienna, and then, until Sept. 1802, in Paris. Subsequently he proceeded to Milan to meet Napoleon at his coronation there, and after having been with the king of Prussia during the battle of Jena, by means of his former acquaintance with the French emperor he procured the signing of a truce, which was rejected by the king. Lucchesini tendered his resignation, and afterward was chamberlain at the court of Napoleon's sister Elisa while she was grand

duchess of Tuscany. He wrote *Sulle cause e gli effetti della confederazione Romana*, &c. (German translation, Leipsic, 1821-'5), and various other works.

LUCENA, a Spanish town in Andalusia, about 80 m. S. S. E. from Cordova; pop. about 16,000. It is chiefly inhabited by an agricultural population and provincial gentry. Manufactures of coarse linens, earthenware, &c., are carried on. In the environs are esteemed medicinal baths.

LUCERN, one of the principal leguminous plants used in field husbandry, of the genus *medicago* and natural order of *fabacea*. The word is supposed to have its derivation in a corruption of the Languedoc word *lauzerda*, the plant being for centuries esteemed in France, and likewise cultivated in Spain under the name of *alfalfa*. For forage, it was not at one time well received in England, owing probably to some unsuitableness of the moist climate. The clovers (*trifolium* spp.) are much more highly esteemed, according to Loudon, who indeed says that the red clover (*T. pratense*) for mowing, and the white clover (*T. repens*) for pasturage, excel all other plants in this respect. In this country the red clover will also endure a severer climate than the lucern, the latter requiring greater heat and sunshine; but in a latitude equally suited to both plants it would be difficult to say which should have the preference. In some respects the lucern is decidedly superior, as in being perennial and consequently remaining longer in the soil. As a crop, lucern is as abundant as red clover, and whether green or dry is equally relished by cattle, while its yield of green fodder continues later in the season than that of red clover. There seems to be some diversity of opinion respecting lucern in different parts of the United States. It has been highly recommended as a plant fitted to the field culture of Massachusetts; yet we are informed by Dr. Darlington that it does not find much favor with the farmers of Pennsylvania, being now rarely seen there, though formerly cultivated on a small scale as fodder. He adds that its culture is successful in New Mexico, where it is cut several times in the season. ("American Weeds and Useful Plants," New York, 1859.) As early as 1793 and 1794 Chancellor Livingston made experiments with it as a forage crop, and spoke favorably of its merits in a paper published in the "Transactions of the Society for the Promotion of Agriculture," &c. (Albany, 1801). The late John Lowell of Massachusetts commended it in several articles, to be found in the 7th and 8th volumes of the "New England Farmer," for the years 1828-'30; and running through several successive years of the same journal may be found valuable remarks on its culture and uses. As late as 1857 Mr. Flint, in his fourth report as secretary of the Massachusetts board of agriculture, brings it before the attention of farmers in that state. It seems to be generally agreed that it

is useless to sow lucern upon poor sandy or gravelly soils, or on wet clays. In a good, rich, loamy soil, its roots strike down to a great depth, enabling it to resist drought and produce very profitable crops for from 5 to 10 or 12 years. It is conjectured that the failures in its cultivation have been owing to want of a proper attention to the preparation of the ground. In Europe it is customary to highly manure the field for 2 or 3 crops preceding the raising of the lucern, and to deeply plough and trench; it is thought necessary to have it clear of weeds, and for this purpose two successive crops of turnips are employed in getting it ready. Nearly the same practice is recommended in this country, as it is said that after lucern has been grown a few years on the same soil, the latter should be broken up and cultivated with some other crop or laid down to the natural grasses a length of time equal to that during which it had previously remained in lucern, when it can be safely sown with it again. Several of the leguminous plants seem to benefit rather than exhaust the ground on which they grow, as seen in the good results arising from the common locust tree when it is induced to grow upon thin soils, and in other instances. It has been conjectured that much of their nourishment is derived from the atmosphere, and that their leaves, stems, and roots are enabled to add to the soil in greatly increased proportions. The system of fallowing used abroad is, according to Liebig, practically to expose the land to a progressive disintegration by means of the atmosphere, for the purpose of rendering a certain quantity of alkalis capable of being appropriated by plants; and a careful tilling of fallow land increases and accelerates this disintegration. For the purposes of agriculture it is quite indifferent whether the land is covered with weeds and with such plants as do not abstract the potash of the soil. Many species of the *leguminosæ* contain remarkably small quantities of alkali or salts in general, and not so much as one per cent. of the phosphates of lime and magnesia. Such plants belong to that class which are called fallow crops, and the reason why they do not exercise any injurious influence on the grasses and grains that are cultivated immediately after them, is that they do not extract the alkalis of the soils and only a very small quantity of the phosphates. In this way the lucern has performed an important office for the fields where it has been raised; and soils which would bear only a medium crop of wheat at first, have produced a greatly increased quantity after being laid down to lucern a few years until it had enriched them. It is best to cut lucern as soon as it begins to flower, or even earlier, when it is neither too succulent to cure readily, nor so coarse, hard, and woody as to be unpalatable to cattle. When cut and fed green it is an exceedingly valuable plant for soiling cattle, or it may be cut and cured and used like clover hay; but

in either case it must be cut before blossoming. The stem of lucern is erect; its leaves consist of 3 obovate-oblong, dentate leaflets, having lanceolate subdentate stipules; the numerous flowers are borne on racemes, are of a pale blue, violet, or purple color, and are succeeded by spirally twisted, finely reticulated, several-seeded pods. It is recognized as a species known to the ancients, being the *medick* (*μυδική*) of Theophrastus, and the *medica* of Pliny. The lucern of Switzerland, which is found to succeed upon poor soils, is quite another species (*M. falcata*), a native of Europe, on dry mountainous pastures, and a coarse and hardy kind.

LUCERNE (Ger. *Lucern*), a central canton of Switzerland, bounded N. by Aargau, N. E. by Zug, E. by Schwytz, S. by Unterwalden and Bern, and W. by Bern; area, about 600 sq. m.; pop. in 1850, 152,843, mostly Roman Catholics. The southern part of the canton belongs to the basin of the Reuss, and the N. part to that of the Aar. The former river flows through the lake of Lucerne. The other principal sheets of water are the Sempach and Baldeg (or Heideg) lakes. The canton is not mountainous excepting at its S. extremity, on the borders of Unterwalden and the Bernese Oberland, where however even the highest peaks of Mount Pilatus do not attain the limits of perpetual snow. The group of which this mountain consists is situated S. W. of the town of Lucerne, extending for nearly 80 m. along the borders of Lucerne and Unterwalden. The highest of the 7 peaks of this group are the Tomlishorn (about 6,900 feet) and the Esel (6,700). The soil is fertile, and yields more corn than is needed for the population. The rearing of cattle, however, is the principal branch of industry. Fruit trees abound, and the vine is cultivated to some extent. There are also some manufactures of linen, cotton, and other goods, and some commerce is carried on with Italy by the St. Gothard pass. The canton sends 7 members to the national council of Switzerland. The lake of Pilatus, which is associated with this canton by several historians of the middle ages, has been recently drained. The canton early joined the Swiss confederation. After 1830 it belonged to the so called "regenerated cantons," but its liberal constitution was overthrown in 1841 by the "theocratico-ochlocratic" party, which led to the bringing in of the Jesuits in 1844, and the war of the Sonderbund in 1847—Lucerne being the head and centre of the 7 Catholic cantons. (See SWITZERLAND.)—LUCERNE, the capital, situated at the N. W. extremity of the lake of Lucerne, in sight of the snowy Alps of Schwytz and Engelberg, and 10 m. from Mount Rigi, is traversed by the river Reuss, and connected through the central Swiss railway with the principal towns of Switzerland; pop. in 1850, 10,068. The town is surrounded by a circle of ancient watch towers, and is walled in on the land side. The chief curiosities of Lucerne are the bridges which

span the Reuss, viz.: the mill bridge, which is decorated with paintings nearly obliterated of the "Dance of Death," the *Reussbrücke*, and the *Kapellbrücke*. Against the timbers supporting the roof of the last are suspended nearly 80 pictures illustrative of the patron saints of the town and of Swiss history. The *Hofbrücke*, the largest bridge, was removed in 1852. Commerce and industry are not very extensive. Near Lucerne is the monument erected in 1821 in honor of the Swiss guards who fell in the defence of the Tuileries, Aug. 10, 1792, the model for which was designed by Thorwaldsen.—**LAKE LUCERNE** (called *Vierwaldstätter-See*, "lake of the four forest cantons," from the cantons of Uri, Unterwalden, Schwytz, and Lucerne, which form its shores) lies at a height of about 1,400 feet above the level of the sea, and branches in different directions, its various bays being named after the chief places situated on them. The W. branch is thus called the lake of Lucerne; the bay of Alpnach is on the S., that of Küssnacht on the N., and Buochs stretches E. and W.; while the bay of Uri constitutes the E. end of the lake. The total length is about 25 m.; the breadth varies greatly. Its scenery is superb. The patriotic (according to recent criticisms, legendary) deeds of William Tell took place on its shores. Perched on a cliff of the bay of Küssnacht is the ruined castle of New Hapsburg, and near it a fortress which belonged to the counts of Hapsburg, the progenitors of the imperial Austrian dynasty. The lake is visited by violent gales, blowing at the same time from opposite quarters of the compass in different parts of it.

LUCETTO DA GENOVA. See CAMBIASO.

LUCIAN (Lat. *Lucianus*, Gr. *Λουκιανός*), one of the wittiest and most voluminous of Greek authors, born in Samosata, Syria, about A. D. 120, died in Egypt about 200. His parents being too poor to give him a learned education, he was apprenticed when about 14 years of age to his maternal uncle, a reputable sculptor in his native city. Receiving a severe flogging for an act of carelessness, he returned home, and devoted himself to the study of rhetoric and literature. He travelled for some time in Ionia, and having completed his studies began to practise as an advocate at Antioch; but, meeting with no success, he was driven to writing speeches for others, instead of delivering them himself. He next visited the greater part of Greece, Italy, and Gaul, giving lectures in the cities. At Athens he made himself familiar with the Attic dialect, and cultivated an acquaintance with the philosopher Demonax. In Gaul he appears to have remained for several years, and here he chiefly gained his professional reputation, and made himself rich. On returning to his native country, he applied himself to writing, but still travelled occasionally, visiting Ionia and Achaia about A. D. 160 or 165, and Paphlagonia about 170. While in Paphlagonia he planned various contrivances

for exposing the impostures of the pseudo-prophet Alexander, who accordingly ordered the crew of the vessel in which Lucian was returning home to throw him overboard. From this fate he was saved only by the intervention of the captain, who had him conveyed out of the ship and set on shore. In his latter days he was appointed procurator of part of Egypt, and was in expectation of a proconsulship when he died.—The works of Lucian are of a very miscellaneous character. The best known are his "Dialogues," compositions exhibiting various degrees of merit, and every variety of style, from sober seriousness to the broadest humor and buffoonery. They are in general directed against the gods, philosophers, and absurdities of paganism, which, according to Suidas, procured him the surname of the Blasphemer. In the "Sale of the Philosophers" the founders of the different sects are put up to auction, Hermes being the auctioneer. Pythagoras brings 10 minæ; Diogenes, with his rags and cynicism, but 2 oboli; for Democritus and Heraclitus there are no bidders; Socrates is knocked down to Dion of Syracuse for 2 talents; Epicurus goes for 2 minæ; Chrysippus the stoic is bought for 12; while Pyrrho, whose price is not mentioned, persists in doubting whether he has been disposed of or not, even after having been sold, paid for, and delivered. "The Banquet, or *Lapithæ*," is one of the most humorous of all Lucian's dialogues. The scene is a wedding feast at which a representative of each of the principal philosophic sects is a guest. The unlettered portion of the company behave with propriety; but the philosophers commence a discussion which ends in a pitched battle. The "Dialogues of the Dead" have found numerous and distinguished modern imitators, including Fontenelle, Voltaire, and Lord Lyttelton. The earlier editions of Lucian's works are those of Florence (1496) and Venice (1503). The best are those of Hemsterhuis and Reitz (8 vols. 4to., Amsterdam, 1743), and Lehmann (9 vols. 8vo., Leipsic, 1821-'31). There is an incomplete English version by Dr. Thomas Franklin (4 vols. 8vo., London, 1781); a much superior German one by Wieland (6 vols. 8vo., Leipsic, 1788-'9); a French translation by De Ballu (6 vols., 8vo., Paris, 1788); an Italian translation by Manzi (1819-'20); and an English version of the entire works by William Tooke (3 vols. 4to., London, 1820).

LUCIAN, SAINT, a Greek presbyter and theologian, born in Samosata, Syria, about the middle of the 3d century, died in Nicomedia, Bithynia, in 312. Having lost both his parents when 12 years old, he distributed his property to the poor, and removed to Edessa, where he was baptized, and became the pupil of Macarius, a Christian famed for his biblical learning. Having been admitted to orders, he repaired to Antioch, and there opened a theological school, attended by numerous students. He was excommunicated for heresy by 3 successive bishops of Antioch, and remained without the pale

of the church for several years. He was in fact the founder of Arianism, and even the great leader who subsequently gave name to that form of doctrine did not disdain to avow himself his disciple, as is evident from a letter addressed by him to Eusebius of Nicomedia, in which he calls that prelate "fellow Lucianist." Lucian finally submitted himself to the authority of the church, and attained a higher reputation for learning and piety than ever. In the persecution under Maximinus, having been arrested in Antioch, he was transported by land to Nicomedia, and put to the torture, soon after which he died in prison. He was enrolled in the calendar of the church as a saint and a martyr. He was the author of two short treatises on the Christian faith, and of some letters, all of which have perished, except one fragment, preserved in the "Alexandrian Chronicle." His greatest work was a revision of the Septuagint, which was generally used in the eastern churches.

LUCIFER (Lat., the bringer of light), the name of the planet Venus, when it is a morning star, Hesperus being its name when it appears in the evening. In Greek mythology, Lucifer was the son of Astræus and Aurora, and together with the Hours had charge of the horses and the chariot of the Sun.—Lucifer is also one of the names of the devil, being applied to him from an allegorical interpretation by the church fathers of a passage (Isaiah xiv. 12) in which the king of Babylon is likened to the morning star.

LUCIFER, bishop of Cagliari, died about 370. In 354 he was sent by Liberius, bishop of Rome, as legate to the council of Milan, to uphold, in conjunction with Eusebius of Vercelli, the cause of the Catholic church against the Arian emperor Constantius. In consequence of the firmness with which he withstood the wishes of Constantius, he was arrested, and carried from place to place as an exile, suffering great hardships. While residing at Eleutheropolis, in Palestine, he composed his principal work, entitled *Ad Constantium Augustum pro Sancto Athanasio*. On the death of Constantius Lucifer was restored to freedom, and commissioned by the council of Alexandria to aid in healing the disorders which afflicted the church of Antioch in consequence of the supposed Arianism of Meletius its bishop. His violence, however, only increased those disorders, and exposed him to the censure of his best friends. Chafing under the rebuke, and disgusted with the moderation of his party, he retired in 363 to his native island of Sardinia, and there founded a small sect called Luciferiani, whose most distinguishing characteristic was inveterate hostility to Arianism. The first edition of his works appeared at Paris in 1568; the best is that of the Coleti (Venice, 1778).

LUCILIUS, CAIUS, a Latin poet, born in Suessa, a city of the Aurunci, in 148, died in Naples in 103 B. C. He served at a very early age under the younger Scipio in Spain, and is said

to have been maternal grand-uncle of Pompey the Great. He was one of the fathers of Latin poetry, and, if not absolutely the inventor of Roman satire, he was at least the first to mould it into that form which received full development in the hands of Horace, Persius, and Juvenal. The satires of Lucilius (as they are collectively called, though many of them appear not to have been of a satirical character) originally consisted of 80 books, of which over 800 fragments are still extant, the greater number however consisting of single lines or isolated couplets, and the longest of them extending to only 13 verses. The fragments of Lucilius were originally collected by Robert and Henry Stephens, and published in the *Fragmenta Poetarum Veterum Latinorum* (Paris, 1564).

LUCINA (Gr. *Εὐθεμία*, Ilithyia), the goddess who, among the Greeks and Romans, was supposed to preside at the birth of children. According to the Hesiodic theogony, she was a daughter of Jupiter and a sister of Hebe and Mars, but in later times she was regarded as identical with Juno or Diana. Her principal places of worship were Rome, Crete, and Athens. On her festival, celebrated March 1, the matrons adorned her temples with flowers and prayed for fecundity, an easy delivery, and a fortunate posterity. Her worship was probably founded among the Dorians in Crete, and thence spread over Delos and Attica. Her birthplace, according to Cretan tradition, was a cave in the territory of Onossus; others believed that she came from the Hyperboreans.

LÜCKE, GOTTFRIED CHRISTIAN FRIEDRICH, a German theologian, born in Egeln, near Magdeburg, Aug. 23, 1792, died in Göttingen, Feb. 14, 1855. He studied at the universities of Halle and Göttingen, where Knapp, Gesenius, and Planck were among his teachers. His first published work was *De Ecclesia Apostolica* (Göttingen, 1818), a prize essay. In 1818 he became tutor in the theological faculty of Göttingen. In 1816 he went as *Privatdozent* to Berlin, attracted especially by the reputation of Schleiermacher, who henceforth numbered him among his warmest friends and greatest admirers, though Lücke can hardly be called his follower. In 1818 he accepted a call to the new university of Bonn; but in 1827 he returned, as ordinary professor, to Göttingen. His two most important works are: *Grundriss einer neutestamentlichen Hermeneutik* (Göttingen, 1817), and a "Commentary on the Gospel according to John" (4 vols., Göttingen, 1820-32). The latter work, in particular, is still classed among the best exegetical productions of German theology. In Berlin, he edited with Schleiermacher and De Wette the *Theologische Zeitschrift*; in Bonn, with Gieseler, the *Christliche Zeitschrift*. Afterward he was assistant editor of the *Studien und Kritiken*, and a frequent contributor to the *Deutsche Zeitschrift für christliche Wissenschaft*, the *Göttinger gelehrte Anzeigen*, and other journals. His biographical essays on his teacher Planck (1835) and his friends De Wette

(1850) and Schleirmacher (1854) are especially valued. His library was purchased after his death for the divinity school at Cambridge, Mass.

LUCKNOW, a city of Hindostan, capital of the province and former kingdom of Oude, situated on the S. bank of the river Goomtee, which is here navigable at all seasons, 610 m. N. W. from Calcutta, 280 m. S. E. from Delhi, and 53 m. N. E. from Cawnpore; lat. $26^{\circ} 52'$ N., long. 81° E.; pop. in 1856 estimated at 300,000. The Goomtee is here crossed by 3 bridges, one of iron, one of stone, and one of boats. A distant view of the city, with its numerous turrets and pinnacles, conveys a pleasant impression, which is dissipated however by a closer inspection of its narrow, filthy streets, and mean mud or bamboo houses thatched with straw. The streets are generally 10 or 12 feet below the level of the shops on each side, but the English quarter is well built and adorned with gardens. In contrast with the dwellings of the native population, there are many public buildings of remarkable beauty. The Shah Nujeeb, or Imambarra of the nabob-vizier Azof-ud-Dowlah, is a fantastic brick structure, coated with white cement, and topped with several Moslem minarets and pointed Hindoo domes. It consists of a number of buildings surrounding two courts which are entered by magnificent gateways. The name Imambarra denotes a kind of edifice erected by Mohammedans of the Sheeah sect for the celebration of the festival of the Mohurram. Of 5 royal palaces in the city, the principal are the Fureed Buksh, a long range of buildings on the river bank, more remarkable for size than beauty, and the Kaiserbagh. The kings of Oude had also many fine country seats in the neighborhood, one of the most elegant of which is the Dilkoosha (Heart's Delight), about 2 m. toward the S. The Begum Kothee is a collection of palatial edifices formerly occupied by native princesses. "Constantia" is the name given to a curious mansion, loaded with incongruous ornaments, which was erected by the French adventurer Claude Martin, who went to India as a private soldier and rose to great power and opulence under the native government. A better monument to his memory is the Martinière, a college for half caste children. An English church, an observatory, and a hospital and dispensary are the other principal buildings. The British residency was destroyed during the siege of Lucknow at the time of the late mutiny. Since that event many changes have also been made in the plan of the city, as whole streets have been pulled down in accordance with the system of defence adopted by the British in 1858. The seat of government of the former kingdom of Oude was removed from Fyzabad to Lucknow in 1775, and the latter city continued to be the royal residence until the annexation of the territory to the British dominions.—During the mutiny of 1857 Lucknow was the theatre of many exciting events. Disaffection manifested itself among the native troops in

the early part of April. The sepoys set fire to a number of bungalows, and refused to use their cartridges, and a regiment was consequently disarmed, May 8, the ringleaders being imprisoned. On May 30 other insurrections took place, and though some of the mutineers were captured or killed, most of them escaped to Seetapore and gave the signal for rising to nearly all the native regiments in the province. In the mean time the chief commissioner, Sir Henry Lawrence, had placed the residency and a wide enclosure around it in a state of defence, and collected there many of the women and children and the principal stores. Several other posts were also garrisoned, but subsequently abandoned. On June 30 Lawrence marched out to attack a body of rebels about 8 miles from the city, but fell into an ambush at Chinhut and was routed with great loss. The mutineers now collected in force around the residency, and began a vigorous siege. Lawrence was killed by a shell (July 4), and was succeeded by Major Banks as civil commissioner and Brigadier Inglis as military commandant. The besieging force at this date amounted to 10,000; the British did not number 1,700, and this disparity was not counterbalanced by any superiority of fire or engineering skill on the part of the garrison. After 12 weeks' defence, during which the British suffered from the ravages of cholera, small pox, and fevers, scarcely less than from the fire and assaults of the enemy, Gens. Havelock and Outram fought their way in with a relieving force, Sept. 25, but suffered such loss that they were unable either to withdraw the garrison or to bring in their own ammunition, baggage, and sick and wounded that had been left at the Alumbagh fort, about 4 m. distant. Among the killed was the gallant Gen. Neill. The defence was now resumed with fresh vigor, Sir James Outram, as senior officer, taking the command; the line of intrenchment was enlarged, and the diseases and discomforts heretofore occasioned by the narrowness of the British quarters were in some degree avoided, but the garrison suffered with increasing severity from scarcity of provisions. At the same time a defence no less gallant was maintained at the Alumbagh by the small party which had been left there under Col. McIntyre, until on Nov. 11 Sir Colin Campbell reached that fort on his way to Lucknow. On the 14th he captured the Dilkoosha and Martinière, and on the 17th, after some desperate conflicts in which the beleaguered garrison ably seconded their rescuers, the 3 generals met. A day or two later the residency was evacuated, the British withdrawing by night to the Dilkoosha, where on the 25th Sir Henry Havelock died of dysentery. Gen. Outram was left with a division at the Alumbagh to watch the enemy, and the rest retired in safety to Cawnpore. The condition of the garrison during this heroic defence of 5 months is best seen by the following statement of their strength at the outset, at

the relief by Havelock, and at the rescue by Campbell:

Date.	Europeans.	Natives.	Total.
July 1.....	927	765	1,692
Sept. 25.....	577	402	979
26.....	2,707	712	3,420
Nov. 19.....	1,938	268	2,206

During this period it was calculated that the number of shot and other projectiles fired by the rebels averaged one every second. "I am aware," said Sir James Outram, "of no parallel to our series of mines in modern war. Twenty-one shafts, aggregating 200 feet in depth, and 3,291 feet of gallery, have been executed. The enemy advanced 20 mines against the palaces and outposts; of these they exploded 3 which caused us loss of life, and 2 which did no injury; 7 have been blown in; and out of 7 others the enemy have been driven and their galleries taken possession of by our miners." In Jan. 1858, Outram was subjected to another siege at the Alumbagh by 30,000 rebels, whom he defeated with about $\frac{1}{10}$ that number of troops; and on Feb. 21, with 6 guns and not quite 400 men, he routed another force of 20,000. In the mean time the insurgents had fortified the city and placed in it a garrison estimated at from 40,000 to 80,000 strong. Sir Colin Campbell arrived to besiege them about March 1, and on the 5th had collected an army of 22,000 men. Sending Outram to the N. side of the Goomtee, he was enabled to conduct his approaches on both banks at once, capturing the principal buildings one after another, and gradually advancing toward the Kaiserbagh and the Begum Kothee, which were judged to be the keys of the whole city. Almost every house and enclosure had been fortified and loopholed. The British operations were conducted chiefly by the artillery and engineers, the sappers cutting through the lower walls of the buildings or making passages under ground, and the infantry assaulting only when other resources failed. Thus Campbell's loss did not exceed 1,100, while that of the mutineers was 4 or 5 times as great. The Begum Kothee was taken on the 11th, and on the same day the commander-in-chief had an interview with the Nepaulese chieftain Jung Bahadoor, who had brought 9,000 Gorkhas to his assistance. On the 14th the Imambarra and Kaiserbagh were captured, on the 20th Sir Colin issued a proclamation calling upon the peaceable inhabitants to return to their houses, and on the 21st the final conquest of the city was complete. Most of the rebels made their escape; among them were the newly proclaimed young king of Oude, his mother the Begum, and the fanatical Mohammedan leader known as the Moulvie. The British commander now placed the city in a state of defence, and left a garrison there, while the main body of the army was broken up for service in detachments.

LUCRETIA. See BRUTUS, LUORUS JUNIUS.

LUORETIUS (TITUS LUORETIUS CARUS), a Roman philosophical poet, concerning whose personal history little is known. According to the Eusebian chronicle, which is almost the sole authority, he was born in 95 B. C., was driven mad by a philter, composed in his intervals of reason several works which were revised by Cicero, and died by his own hand in 52 B. C. There are no other particulars concerning his life from authentic sources. He is known only as the author of *De Rerum Natura*, which is by universal consent the greatest of didactic poems. It is in 6 books, in heroic verse, extends to 7,400 lines, and is addressed to C. Memmius Gemellus, prætor in 58 B. C. It is designed to develop clearly and to illustrate in an attractive way the atomic theory of the universe; to show that there is nothing in the history or condition of the world which requires the creative agency of a supreme power, but that all objects may be formed by the union of elemental particles governed from all eternity by certain laws. The first book contains a magnificent apostrophe to Venus, as the allegorical representation of the reproductive power, an invective against the monster superstition, an elucidation of the formula that nothing can be produced from nothing, and a statement of the doctrine of ultimate atoms. The development of the atomic theory occupies the 2d book. The 3d book aims to prove that soul and body are one and indistinguishable, and live and perish together, and closes with a fine exposition of the folly of fearing death, which is to extinguish feeling for ever. The 4th treats of the senses, of sleep, dreams, and love. The 5th and most impressive book discusses the origin of the world, the movements of the heavens, the changes of the seasons, and the progress of man, society, institutions, inventions, and sciences. The 6th book explains extraordinary natural phenomena, as thunder, lightning, storms, earthquakes, and volcanoes. Throughout the work the most abstruse speculations are clearly embodied in majestic verse, and the dryness of the subject and the absurdity of the views are relieved by the sublimity of the poetry and by digressions of remarkable power and beauty. The best editions are those of Gilbert Wakefield with Bentley's notes (3 vols. 4to., London, 1796, and Glasgow, 1813) and of Forbiger (Leipsic, 1828). There are complete English translations in verse by John Mason Good (1805), and by Thomas Busby (1813), and in prose by the Rev. J. S. Watson (1851), which forms with the version of Good one volume of "Bohn's Classical Library."

LUULLUS, LUCIUS LICINIUS, a Roman general, born about 109 B. C., died about 57 B. C. His first appearance in public life was as the accuser of the angur Servilius, who had procured the banishment of his father. This prosecution, though unsuccessful, and leading to scenes of violence and blood, was yet deemed highly creditable to the young Lucullus. He served in the social war, and after-

ward accompanied Sylla to Greece and Asia as quaestor, on the outbreak of the first Mithridatic war, 88 B. C. During the siege of Athens, Lucullus, in obedience to the orders of Sylla, collected a naval force from the allies of Rome, with which he defeated the fleet of Mithridates off the coast of Tenedos. After the conclusion of peace with the king of Pontus he was appointed to collect from the cities of Asia the tribute which Sylla had imposed on them as a punishment for their recent revolt. In the discharge of this duty Lucullus displayed the utmost humanity and kindness. In 80 he returned to Rome to fill the office of curule aedile, to which he had been elected in his absence, together with his younger brother Marcus. The games exhibited by the Luculli during their aedileship were remarkable for their magnificence, and for being the first at which combats of elephants and bulls were introduced. The elder brother was so highly esteemed by Sylla that the ex-dictator confided to him the revision and correction of his Commentaries, appointed him guardian of his son Faustus, and caused a special law to be passed to enable him to hold the praetorship immediately after he had been aedile. In 74 he was consul with M. Aurelius Cotta, and having been appointed to conduct the second war against Mithridates, he carried it on for 8 years with almost invariable success; defeated the king and his generals both by sea and land, and compelled him to seek an asylum at the court of Tigranes, king of Armenia; invaded the latter kingdom, vanquished its sovereign, and captured his capital; and was only prevented from consummating the overthrow of his formidable antagonist, and bringing the war to a triumphant conclusion, by the insubordination of his own soldiers. He also devoted much of his attention to the condition of the provinces, which were suffering under the oppressions of the Roman revenue officers, who thus became his enemies. At length the Manilian law was enacted, which deprived Lucullus of his command, and gave it to his rival Pompey. He returned to Rome, and for the rest of his life took hardly any part in public affairs, but spent most of his time at his rural villas, in the enjoyment of a princely fortune, and in conversation with philosophers and literati. He collected a valuable library, which was open to all, and wrote a history of the social war in Greek, which is lost. His gardens near Rome were laid out in a style of extraordinary splendor, and his horticultural works in the neighborhood of Neapolis were on so gigantic a scale that Pompey called him in derision "the Roman Xerxes." He spared no expense in the entertainment of his friends, and a single supper which he gave them is said to have cost him 50,000 denarii, or about \$3,500. He was the first introducer of cherries into Europe, the tree receiving its Latin name from Cerasus, a town of Pontus.

LUDEN, HENRICH, a German historian. born

in Loxstedt, duchy of Bremen, April 10, 1780, died in Jena, May 23, 1847. He studied theology, history, and philosophy at Göttingen. In 1806 he became extraordinary, and in 1810 ordinary professor at Jena, where he lectured principally on history. He was a very popular teacher, and induced many young men of talent to devote themselves to history. When a considerable part of Germany was under the rule of the French, Luden was among the first and most influential writers who stirred up the patriotic sentiments of the Germans. His historical publications are very numerous, including, beside biographies of Thomasius (Berlin, 1805), Hugo Grotius (1806), and Sir William Temple (Göttingen, 1808), a comprehensive work on the history of antiquity, *Allgemeine Geschichte der Völker und Staaten des Alterthums* (Jena, 1814); a history of the middle ages, *Allgemeine Geschichte der Völker und Staaten des Mittelalters* (1824); *Die Geschichte des deutschen Volkes* (12 vols., Gotha, 1825-'37), which reaches only to 1287; and others. For 4 years (1814-'18) he was the editor of the "Nemesia, a Journal devoted to Politics and History," published at Weimar. A posthumous work, *Rückblicke in mein Leben* (Jena, 1847), contains many valuable notices of persons and events of his times.

LÜDERS, ALEXANDER NICOLAIEVITCH, a Russian general, born in 1790, of a German family long settled in Russia and distinguished in its state service. He entered the army in 1807, was engaged in the war in Finland in 1808, and took part in the campaigns against Napoleon from 1812 to 1814. In 1831 he led a brigade in Poland, and distinguished himself at the taking of Warsaw. In 1838 he took the place of Muravieff at the head of the 5th corps of infantry. He served in the Caucasus in 1843, and after a long furlough, rendered necessary by ill health, he was sent to the Danubian principalities in July, 1848. In 1849 he entered Transylvania under the convention between the emperors of Austria and Russia with 40,000 men. After capturing Cronstadt and Hermannstadt, he twice defeated Bem, and then marching into Hungary proper, was present with Rüdiger at the surrender of Görgey. When the Crimean war began, Lüders, under command of Gortchakoff, was placed on the Danube, and made a difficult march toward Silistria, but was compelled by sickness to leave the army. When restored to health in March, 1855, he took command of the army of the south, establishing his head-quarters first at Odessa, then at Nicolaieff. In Jan. 1856, the emperor Alexander gave him the superior command in the Crimea, and he was engaged in preparation to carry on the war with the allies when it was ended by the treaty of Paris (March 30), and Lüders retired from the army.

LUDLOW, EDMUND, an English republican, born in Maiden-Bradley, Wiltshire, in 1620, died in Vevay, Switzerland, in 1693. His father, Sir Henry Ludlow, was an extensive land owner in Wiltshire, and one of its repre-

sentatives in the long parliament, where he was a strenuous opponent of the crown. Edmund was educated at Trinity college, Oxford, and on the outbreak of the civil war joined the army of Lord Essex as a volunteer, and was present at the battle of Edgehill. After the death of his father he was returned to parliament for Wiltshire, and obtained the command of a regiment of cavalry. From this period he became prominent as a popular leader, and filled various important civil and military offices. He was a thorough republican, and steadily advocated the establishment of a commonwealth. He was one of the most inflexible of the king's judges, and an ardent supporter of the bill for the abolition of the house of peers. His sturdy independence rendering him obnoxious to Cromwell, he was removed out of the way by being appointed to a high military command in Ireland in 1650. When Cromwell assumed the protectorate, Ludlow entered his solemn protest against the act, and on returning to England refused to recognize the protector's authority. Hence he was regarded with distrust, and compelled to give security not to plot against the government. He then retired into Essex, where he remained till Cromwell's death. Resuming his public career, he took an active part in the political proceedings of the day, laboring to effect the restoration of the commonwealth; but, deeming the return of the Stuarts inevitable, he withdrew from London, and soon afterward went to Switzerland. He returned to England at the revolution of 1688; but being threatened with arrest, he betook himself again to Switzerland, where he passed the rest of his life, engaged in the composition of his "Memoirs." They were published at Vevay (3 vols. 8vo., 1698-'9), and have since gone through various editions. Over the entrance of his villa at Vevay, Ludlow placed the following inscription: *Omne solum forti patria.*

LUDOLPHUS, or LUDOLF, JOB, a German orientalist, born in Erfurt, June 18, 1624, died in Frankfort-on-the-Main, April 8, 1704. He was educated at the university of Leyden, and in 1649 visited Rome, and perfected himself in the knowledge of Ethiopic by conversation with certain Abyssinians who were then sojourning in that city. He afterward filled various official positions, and in 1690 he was made president of the academy of history at Frankfort, where his latter years were spent. He was one of the most eminent orientalists of his age, and was the author of many valuable works relating especially to Ethiopia and its language.

LUDVIGH, JÁNOS, a Hungarian patriot, born in Béla, county of Zips, in 1812. He was a member of the diet of Presburg in 1833, and repeatedly reelected; was a zealous supporter of Kossuth at the diet of Pesth in 1848, and subsequently a commissary of the national government to the main army under Görgey, with whom he remained till July, 1849. After the suppression of the revolution, he escaped to

Germany, and thence went to France, being hanged in effigy at Pesth. He now resides in Brussels, where he has published *Nouvelle page de l'histoire des Habsbourgs* (1859), *La Hongrie et la Germanisation Autrichienne* (1860), *La liberté religieuse et le Protestantisme en Hongrie* (1860), *La Hongrie devant l'Europe* (1860), beside numerous contributions to political and literary periodicals.

LUDWIG OF BAVARIA. See LOUIS.

LUIGI, ANDREA DI, called also L'INGRENO and ANDREA DI ASSISI, an Italian painter, born in Assisi about the middle of the 15th century, died subsequent to 1511. Considerable interest has attached to the history of this painter from the account of him given by Vasari, and which passed current until within a few years. By this it would appear that he was an artist of great genius, the rival and fellow pupil of Raphael, and that in the bloom of youth and the maturity of his powers he was suddenly afflicted with total blindness while assisting his master Perugino in painting his frescoes in the Sistine chapel; whereupon he was pensioned by Sixtus IV. Rumohr in his *Italienische Forschungen* has satisfactorily proved the whole story to be a fiction, and has assigned to Luigi a much lower place as an artist than he has hitherto held.

LUINI, or LOVINI, BERNARDINO, an Italian painter, born at Luino, on the Lago Maggiore, in the latter half of the 15th century, died subsequent to 1530. He is supposed to have been a scholar of Leonardo da Vinci from the closeness with which he imitated his style. The best judges are frequently at a loss to discriminate between the two, and out of Italy Luini's pictures are almost invariably ascribed to Leonardo. The "Christ Disputing with the Doctors," in the British national gallery, formerly attributed to Leonardo, is now supposed to be the work of Luini. His best pictures in oil and fresco are in Milan, Lugano, and Saronno, including his "Magdalen," "St. John with the Lamb," and "The Enthroned Madonna." In elaborate finish, beauty of color, and expression, they are hardly inferior to the works of Leonardo. His frescoes are among the finest early specimens of the art. His two sons, Aurelio and Evangelista, assisted him occasionally in his frescoes.

LUKE, SAINT, the evangelist, the author of the third Gospel, and, according to ecclesiastical tradition, also of the Acts of the Apostles. The name is now generally regarded as an abbreviation of Lucanus. It appears only 3 times in the New Testament. If these passages refer to the author of the Gospel, he was a physician and a collaborator of St. Paul. If Luke was also the author of the Acts, he was in A. D. 52 with Paul in Troas, and accompanied him thence as far as Philippi. He followed Paul on his third missionary tour through Macedonia, over Troas, Miletus, Tyre, and Cæsarea, to Jerusalem, and was with him again when Paul was sent as a prisoner to Rome. This is all

that is recorded of him in the New Testament, and even Irenæus knew nothing that could be added to it. Many more statements concerning his person are found in the ecclesiastical writers of later centuries. According to Eusebius and others, he was a native of Antioch. Epiphanius made him one of the 70 disciples, and one of the two disciples who went to Emmaus. By Epiphanius he is said to have labored in Dalmatia, Italy, Macedonia, and especially in Gaul; by Eucumenius, to have gone to Africa. The legend that he was a painter is first alluded to by Nicephorus. Constantinople, Patræ in Achaia, and several other towns are mentioned as the place where he died. Jerome ascribes to him an age of 84 years. The Roman Catholic church celebrates his festival on Oct. 18. The testimonies which ascribe to Luke the authorship of the third Gospel reach back to the highest antiquity. Irenæus mentions that Luke wrote down the Gospel proclaimed by Paul; and all admit that at the time of Irenæus and Tertullian, his Gospel was accepted throughout the whole church in its present form. A statement of Tertullian, that Marcion so changed a copy of the Gospel of Luke as to make it conform to his own views, has called forth in modern times a number of investigations of the relation of Luke's Gospel, as we have it in the New Testament, to that of Marcion. Ritschl (*Das Evangelium Marcions*, 1846) and Baur (*Die Kanonischen Evangelien*) attacked the authenticity of the Gospel of Luke, and claimed for that of Marcion a priority of time; while Hilgenfeld (*Das Evangelium Justini*, 1850) and Volkmar (*Das Evangelium Marcions*, 1852), with many others, advocated the originality of Luke's. The statement in the first verse of the Gospel of Luke, that "many" before him "have taken in hand to set forth a declaration of those things which are most surely believed among us," has been understood by several interpreters as intimating an acquaintance with the Gospels of Matthew and Mark on the part of Luke, while others refer the expression "many" to other writers. As the occasion for writing his Gospel, the author himself mentions (Luke i. 3) his desire to give to his friend Theophilus a faithful narrative of the life of Christ. With regard to the time of its composition, the prevailing opinion before De Wette and Credner was, that it was written previous to the destruction of Jerusalem; but more recently the opinion that it was composed after that event has found advocates in different theological parties. Achaia, Boeotia, and Alexandria are mentioned by the ancients, and Oesarea and Rome are suggested by modern writers, as the place where the Gospel was composed.—The Acts are likewise addressed to Theophilus. They were written after the Gospel (Acts i. 1, 2), and at all events after the year 64, as Paul during his captivity was teaching in Rome for two years. Since Jerome the opinion has generally prevailed that they were composed at Rome.

Some postscripts in manuscripts and versions point to Alexandria, while several modern writers, as Köstlin, have assumed Asia Minor. Valuable commentaries on both the Gospel and Acts are contained in the collective works of Olshausen, De Wette, Meyer, and Lange (the commentary on Luke (1860) is by Oosterzee); commentaries on the Gospel of Luke in Kuinoel's, Jacobus's (professor in Alleghany seminary), and J. J. Owen's (of New York) commentaries on the Gospels. A commentary on the Acts was also published by Joseph Addison Alexander (1857). Some other works, which have been sometimes ascribed to Luke in the ancient church, as *Acta Pauli*, *Liturgia XII. Apostolorum*, were long ago acknowledged to be spurious.—See Schleiermacher, *Die Schriften des Lucas* (Berlin, 1817).

LULLY, or LULLI, JEAN BAPTISTE, the founder of the French opera, born in Florence in 1683, died in Paris, March 22, 1687. He was of obscure parentage, but having at the age of 10, by his wit, vivacity, and skill on the guitar, attracted the attention of the chevalier de Guise, he was taken by him to Paris as a page for Mlle. Montpensier, the niece of Louis XIV. His personal appearance not pleasing his mistress, he was degraded to the kitchen, where he served in the capacity of a scullion. He possessed a strong taste for music, however, and his leisure hours were spent in practising on an old violin, until he had become a tolerably skilful performer. The princess, hearing of his proficiency, had him instructed under an able master, and in a few months he was admitted into the king's *bande des vingt-quatre*, so called from the number of the instruments, which were all violins. Having composed some airs which pleased the king, he was placed at the head of a new band of 12 violins, called *les petits violons*, which under his direction soon eclipsed the famous twenty-four. To the impulse given by this nucleus of performers French musicians trace their present orchestral proficiency. Lully, continuing to rise in favor with the king, became director of music at the court, and for many years composed airs and accompaniments for the court ballets, a species of dramatic entertainment antedating the opera, and consisting of dances interspersed with singing and recitative. He also furnished music for many of Molière's comedies, in some of which, such as the *Bourgeois gentilhomme*, he performed with great success. The establishment of the opera in France, however, was the chief development of his musical genius. Having obtained in 1672 a patent for opening a theatre for the performance of lyrical pieces, in conjunction with the poet Quinault he devoted himself thenceforth wholly to the composition of operas. His works of this class number 19, and were highly popular with the king and the court. Louis, it is said, would listen to no music but Lully's, whose caprices he was accustomed to indulge with the utmost patience. In the height of his reputation Lully

met with his death in a singular manner. While conducting the performance of a *Te Deum*, composed by himself in honor of the king's recovery from sickness, he accidentally struck his foot violently with the cane with which he was beating time. Inflammation having set in, he had the folly to put himself under the care of a quack, whose treatment he did not long survive. On his deathbed he was required by his confessor, in token of his sincere repentance, to burn the opera he was then engaged in writing. The prince de Conti reproaching him soon after with the destruction of so much good music: "Hush," whispered Lully, "I knew very well what I was about; I have another copy of it."—Lully's claim to be called the father of French dramatic music was earned by many years of meritorious professional labor. He may be said to have created orchestral music in France by the new combinations of sound and the fuller harmonies he introduced into instrumental composition, as well as by the exactness of execution he demanded from the performers. He devoted many hours of each day to drilling his orchestra and singers, and so delicate was his ear that from a remote corner of the theatre he could distinguish the least variation from time or tone in any one of the performers. Sometimes in a fit of passion he would break his instrument over the back of the unlucky violinist; but after the performance he would pay him more than its value, and invite him to dinner. His reputation rests chiefly upon his operas, which are animated by a fine dramatic spirit, and frequently show beauty and pathos in the melodies, although the quaintness and barrenness of the harmonies would contrast but indifferently with the works of modern composers. He is entitled to the credit of having invented the overture, and that spirited movement, the *largo*, which is the general introduction to the fugue. Handel has acknowledged that he modelled his overtures from those of Lully, and Purcell derived many valuable hints from his works. The composer lived in great affluence, and to the day of his death remained in favor with Louis XIV. At his own request he was made one of the *secrétaires du roi*; and when that body hesitated to admit him as a member, the monarch said to him: "I have honored them, not you, by putting a man of genius among them." Most of Lully's biographers describe him as irritable and insolent to his inferiors, jealous of his compeers, selfish, and addicted to gross pleasures. He had however the art of making and preserving influential friends, and passed in society for a brilliant and vivacious man. His avarice gained him the name of Lully *le ladre* among the gentlemen of the court, and to the predominance of this trait has been ascribed his quarrel with Molière and La Fontaine, the latter of whom wrote the only satire he ever penned against the composer. Lully left a fortune of 600,000 livres, the savings of a life of unusual prosperity.

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LULLY, RAYMOND (RAIMUNDO LULLIO), surnamed the "enlightened doctor," a Spanish philosopher and theologian, born at Palma in the island of Majorca in 1235, killed at Boughiah in Algeria in 1315. He was the son of a Barcelonese nobleman in the service of the king of Aragon, and was trained to the profession of arms. After a career of scandalous excesses, at the age of 30 he suddenly renounced the world and its pleasures, divided his property among his family and friends, and, assuming the habit of a Franciscan monk, retired into a solitary place for the purpose of preparing himself for the labors and duties of a missionary, to which, he said, Christ had summoned him in a vision. Here he went through a course of philosophy, theology, and ancient languages, and, having learned Arabic from a slave, became acquainted with the philosophical works of Averroes and other Moorish writers, from which he is supposed to have derived the germ of that system of dialectics by which he hoped to reform science and convert Mohammedans, Jews, and pagans to Christianity. Inspired, as he said, by another heavenly vision, he published in 1276 his *Ars Magna*, in which his system is unfolded at length, and immediately went in search of patrons and proselytes. The remainder of his life was one long and toilsome pilgrimage. Having prevailed upon the king of Aragon to establish a monastery at Palma for the education of missionary monks, he spent many years in fruitless endeavors to procure from successive popes and kings the means of carrying his system into practical operation. He met with no greater encouragement in his attempt to incite a general crusade against the Moslems. Nothing daunted by these disappointments, he determined to go to Africa and test the effects of the "great art" upon the infidels. Scarcely had he broached his design there when he was driven out of the country. He returned to Europe for assistance, was again unsuccessful, and after remodelling his system, he revisited Africa, and at Boughiah employed the "great art" in an argument on the Trinity with a learned Mohammedan, under the pretence of a desire to be converted to Islamism. His design was detected, and he escaped death only by the intercession of his antagonist. Upon his return to Europe, although then 70 years of age, he abated in no respect his exertions for the conversion of the infidels, but travelled through the chief cities preaching a crusade for the recovery of the Holy Land, and urging the necessity of adopting his doctrines. Again unsuccessful, with a zeal which no disappointment could dampen, he went a 3d time to Africa, and was stoned to death at Boughiah in the 80th year of his age. The body of the aged martyr, whom his countrymen deemed worthy of canonization, was brought to his native place for burial.—The *ars magna* of Lully, or *ars Lulliana*, as his followers called it, is a sort of logical machine for combining certain classes of ideas and thereby solving all scientific ques-

tions; or a method of reasoning without the necessity of study or reflection. By means of letters, figures of squares, triangles, and circles, and of sections (*camera*), an indefinite number of formulas is obtained, affording, as it were, the key to all metaphysical problems. This science of sciences, which it was the object of Lully's life to bring into general use as a means, not merely of converting the heathen, but of facilitating the determination of all questions, human or divine, underwent various modifications and improvements in the course of his life. It found many adherents in Spain, and had colleges in Palma, Montpellier, Paris, and Rome; but beyond the reform it effected in the dialectic of the schools, its influence has been inconsiderable, notwithstanding the attempt made by the unfortunate Giordano Bruno 3 centuries later to revive and improve it. One of the most remarkable facts connected with Lully's history is the industry and enthusiasm with which, in the midst of a restless and anxious life, he devoted himself to literary pursuits. It is impossible to enumerate all his works, but they are said to have been more than one man could transcribe in the course of an ordinary life, having for their object the demonstration, by the *ars Lulliana*, of all the primary truths of religion, and embracing in their scope the physical and metaphysical sciences, and to a certain extent the doctrines of the alchemists, who claim Lully as one of their adepts. He has been variously regarded as a sainted martyr and champion of the church, a heretic, a philosopher surpassing Aristotle, or a shallow empiric. Of his zeal for the recognition and adoption of his "art," and his iron resolution in attempting to overcome the obstacles which never ceased to beset him, there can be no doubt; although to the chivalric ardor of the crusader he united the pedantry of the schoolman, and the mystical exaltation of one inspired to the severe and methodical habits of thought of the logician. He had more erudition than judgment, and his system of metaphysics, though founded on that of Aristotle, was so interwoven with mystical fancies, that the apparent regularity of his formulas ill conceals the incoherency of his ideas. He wrote in a barbarous style, which repels the reader. An edition of his works in 10 volumes, edited by Salzinger, was published at Mentz in 1721-'42.

LUMBAGO. See RHEUMATISM.

LUMP FISH, or LUMP SUCKER, a name given to several spiny-rayed fishes of the family *discoboli*. The position of this family has been the subject of considerable difference of opinion among naturalists. Swainson placed them in the order *apodes* with the eels and lampreys; Cuvier ranked them among malacopterygians with the cod and sole; J. Müller properly restored them to the acanthopterygians, but, from the union of their ventrals into a disk, established for them, with the gobioids, the family *cyclopodii*, separating *eleotris*. Prof. Agassiz places the *discoboli* with the mailed-

cheeked fishes, in the neighborhood of the sculpins, separating them entirely from the gobioids. The best known genera of the lump fishes (*discoboli* and *gobieacida* of ichthyologists) are *cyclopterus* (Linn.), *liparis* (Artedi), *lepadogaster* (Gouan), and *gobiesox* (Lacép.). In the genus *cyclopterus* the body is thick and high, without scales, covered with a mucous skin with a few osseous points over its surface; the teeth are small and sharp, on the jaws and pharyngeals; the mouth large; gill covers small, and their openings closed below; branchiostegous rays 6; the pectorals very large, extending under the throat, and embracing the concave disk formed by the united ventrals, by means of which they adhere to rocks and other objects; the skeleton is mostly cartilaginous; the stomach large with numerous pyloric appendages, the intestine long and the air bladder moderate.—The common lump fish (*C. lumpsus*, Linn.), found on both sides of the Atlantic, varies from 8 to 20 inches in length, and may attain a weight of 18 lbs.; its appearance is grotesque and forbidding, its form being clumsy, its skin slimy, its flesh flabby, and its fins comparatively small. The first dorsal fin is rather a fleshy ridge just behind the head, with simple rays; the 2d dorsal, with branching rays, is about opposite the anal; beside the scattered tubercles there are 3 distinct rows proceeding backward respectively from the eye, posterior angle of operculum, and ventral disk. The color is bluish slate above with blackish spots, and yellowish below. The fish is common from the shores of Scotland to the coast of Greenland; notwithstanding its unwholesome look, its flesh is esteemed as food by the northern Europeans. It is not uncommonly thrown up on our beaches during storms, and is occasionally caught by the hook when fishing for cod, but it is not eaten with us. By means of the ventral disk it can attach itself very firmly to objects; it is voracious, feeding principally on young fish; it spawns about May, just before which the colors are brilliant, with tints of blue, purple, and orange. Several other species occur in the vicinity of Greenland, described by Richardson in the *Fauna Boreali-Americana*.—The genus *liparis* differs from the preceding in having a more elongated body, compressed posteriorly, and a single long dorsal with a corresponding anal fin. The unctuous lump fish, or sea snail (*L. communis*, Art.), from 6 to 18 inches long, brownish above with darker stripes, and yellowish white below, is often caught on the shores of Scotland, where it adheres to stones in the small pools left by the receding tide; it feeds on aquatic insects, mollusks, and small fishes; it occurs also on the coasts of Greenland, where other species are found.—In the genus *lepadogaster* the pectorals are very large, descending below the throat, supported by 4 firm rays at the lower part on each side, and united around an oval disk in front of the concave disk formed by the ventrals; there are apparently 2 pairs

of pectorals and 2 pairs of ventrals, but one pair of each are mere folds of skin and not true fins; the membranous fold of the 2d pectorals contains fibrous rays, and is attached to the shoulder bone, and the membranous ventral fold to the styloid or pubic bone, which structural peculiarities, in the opinion of Agassiz, render necessary the separation of this genus and its allies into a distinct family. The body of the Cornish lump sucker (*L. Gouani*, Lacép.) is smooth, with a single dorsal fin opposite the anal and near the caudal; branchiostegal rays 5; no pyloric appendages; the length is only 3 or 4 inches, and the general tint pale flesh color, with carmine spots and patches. There are other species, all remarkable for their powers of adhesion, which enable them to resist strong currents and the action of the waves, and possibly to attach themselves to various objects, or even to fish, for purposes of locomotion, like the remora or sucking fish; they are sluggish in their habits, and delight to hide beneath stones near low water mark; their food consists of crustaceans and marine worms, which they swallow entire; they are very tenacious of life, on account of the small openings from the gills; they have no air bladder. An allied genus is *gobiosox*, in which the pectorals and ventrals form only one disk; the dorsal and anal are short, and separated from the caudal. The toothed lump fish (*G. dentex*, Lacép.), from the Cape of Good Hope, may be known by the strong teeth in the front of the jaws; it is several inches long, and of a scarlet red color.—Other genera are mentioned by Müller, and Agassiz has recently established the new ones of *crossognathus* (from specimens from Charleston, S. C.), *lobognathus* (from Peru), and *ptychocheilus* (from Puget sound).

LUMPKIN, a N. co. of Ga., drained by Chetatee and Etowah rivers and their branches; area, 700 sq. m.; pop. in 1859, 5,490, of whom 504 were slaves. A range of the Blue Ridge crosses its N. border. The surface is generally hilly, and the soil near the rivers highly productive. The county contains a great number of gold mines, which are the richest in the Atlantic region, and copper, silver, magnetic iron, and lead are also found. The productions in 1850 were 242,717 bushels of wheat, 42,110 of sweet potatoes, 16,037 lbs. of rice, and 14 bales of cotton. There were 34 churches, and 1,245 scholars attending schools. Value of land in 1856, \$723,011. Capital, Dahlonega.

LUMPKIN. I. WILSON, an American statesman, born in Pennsylvania co., Va., Jan. 14, 1783. Early in 1784 his father removed to that part of Georgia now known as Oglethorpe county, and in 1797 was appointed clerk of the superior court there, and the son became an assistant in his office. This position gave him opportunities for self-improvement, of which he availed himself, devoting all his leisure moments to the study of law. He had scarcely reached the age of 21 when he was elected to represent his county in the legislature, and was subse-

quently reelected a number of times. He was twice elected governor of the state, in 1831 and 1833. In 1823 he was appointed by President Monroe to mark out the boundary line between Georgia and Florida; and by President Jackson he was appointed one of the first commissioners under the Cherokee treaty of 1835. He was one of the original members of the board of public works, created by the state legislature. He served in the U. S. house of representatives from 1815 to 1817, and from 1827 to 1831, and in the U. S. senate from 1838 to 1841. Of late years Gov. Lumpkin has retired from public life. He now (1860) resides at Athens, Ga. II. JOSEPH HENRY, an American lawyer and jurist, brother of the preceding, born in Oglethorpe co., Ga., Dec. 23, 1799. At an early age he entered the university of Georgia, but after the death of President Finley he went to Princeton, N. J., where he was graduated. In 1820 he was admitted to the bar, and commenced practice at Lexington in his native county, where he soon gained eminence in the profession. In 1844 he retired from the bar on account of ill health, and shortly afterward visited Europe. While abroad his friends presented his name for one of the judgeships of the supreme court, then newly established; in 1845 he was elected one of its first justices, and has continued to hold the office, amid all political changes, until the present time. He has had but little to do with party politics, having held but one political position in his life—that of representative of his native county in the state legislature. As a judge he holds a high position. At the bar he was chiefly distinguished as an advocate in criminal causes, and his extraordinary appeals to the sympathies of jurors are yet the subject of conversation among those who had opportunities of hearing him. He is a prominent advocate of the temperance cause. In 1846 he was elected to the chair of rhetoric and oratory in the university of Georgia, which he declined. He now holds the chief professorship in the Lumpkin law school at Athens, in connection with the state university, of which institution he has been a trustee since 1854.

LUNACY. "A lunatic," says Blackstone, "is one that hath had understanding, but by disease, grief, or other accident hath lost the use of his reason; he is indeed properly one that hath lucid intervals, sometimes enjoying his senses and sometimes not, and that frequently depending upon the change of the moon." The common belief in a connection between the accessions of madness and the phases of the moon was long ago exploded, and in medical science lunacy has been displaced by the better terms insanity and mental alienation. In the law, some text writers, following Sir Edward Coke, have preferred *non compos mentis* as a generic phrase comprehensively descriptive of the various conditions of mental disease or fatuity. "Of unsound mind" has been also much employed in legal language to express

certain forms of derangement. But lunacy, though absurd in itself, and in its proper acceptation referring to but a single phase of insanity, has yet gained a more conspicuous place in legal practice than any other term. Statutes, both English and American, have expressly declared that lunatic shall apply to all persons of unsound mind, and to those who are incapable of managing their affairs; and in England the name includes idiots also. Lunacy may then be fitly employed as a title under which to present the legal relations of insanity. Its medical and scientific aspects are treated under other heads. (See INSANITY, and MEDICAL JURISPRUDENCE.) Here we concern ourselves only with the settled rules of law, which determine the legal status of insane persons.—In England the custody of lunatics and idiots is vested in the court of chancery, not in its character of a court of equity, but as the delegate of the crown, the representative of the *parens patriæ*; for it is the duty of the sovereign to take care of those of his subjects who cannot take care of themselves. In the United States the people have succeeded to the rights and prerogatives of the crown, and therefore it is that here the legislature exercises a protective authority over idiots and lunatics. The statutes of the different states provide that such persons may be put under guardianship; and if a competent judicature have found the fact of lunacy in the prescribed mode, and have appointed a guardian, the fact of lunacy is held to be conclusively proved. Until the contrary be shown, either upon an inquisition of lunacy, or upon special testimony in a given case, every man is presumed to be of sane mind. But if it be proved or admitted that lunacy existed at a particular period, and that the derangement was of a habitual and not of a merely temporary or accidental nature, then it is presumed to continue, unless its continuance be disproved. Thus, in the case of a will, the burden of proving a testator's insanity rests ordinarily on him who impeaches the instrument for this cause. Yet, on the other hand, proof of general and usual insanity may be rebutted by evidence that the act was done during a lucid interval, and the burden of proving this rests on the party who asserts the exception. Moral insanity alone, that is, mere derangement of the moral faculties, does not invalidate a will. The evidence must show a delusion in matters of fact. A higher degree of insanity must be shown, in order to absolve from criminal guilt, than to discharge from civil obligation. In all cases the jury must be instructed that every man is to be presumed to be sane, and to possess a sufficient degree of reason to be responsible for his crimes, until the contrary be proved to their satisfaction; and that to establish a defence on the ground of insanity, it must be clearly proved that at the time of the commission of the act, the party accused was laboring under such a defect of reason from disease of the mind as not to know the nature and quality

of the act he was doing; or if he did know it, that he did not know he was doing what was wrong. These were the rules laid down by the judges in *McNaghten's case* before the house of lords. In *Rogers's case* in Massachusetts, Chief Justice Shaw instructed the jury that in case of partial insanity the party must have sufficient power of memory to recollect the relation in which he stands to others, and in which others stand to him; and to know that the act he is doing is contrary to the plain dictates of justice and right, injurious to others, and a violation of duty. But, on the contrary, if he still understands the nature of his act and its consequences, if he has a knowledge that it is wrong and criminal, and mental power sufficient to apply that knowledge to his own case, and to know that if he does the act he will do wrong and receive punishment, the partial insanity is not sufficient to exempt him from responsibility for criminal acts. If it be found that the mind of the accused was in a diseased and unsound state, the question will be whether the disease existed to so high a degree that for the time being it overwhelmed all reason, conscience, and judgment, and whether the person in committing the crime acted from an irresistible and uncontrollable impulse. If so, then the act was not the act of a voluntary agent, but the involuntary act of the body without the concurrence of a mind directing it.—In respect to the proof of insanity, the weight of authority is, that such a defence must be substantially proved as an independent fact, and the burden of proof is of course on the defendant. In Massachusetts the defence is made out if the preponderance of evidence is in favor of the prisoner's insanity. Evidence of acts, declarations, and conduct, both before and after the time when the alleged crime was committed, is admissible as tending to show insanity at the moment of the act. Evidence of hereditary insanity is also admissible, both in civil and criminal cases.—Whatever be the nature or degree of mental disease, if the mind be so much impaired as to be incapable of intelligent disposal in the ordinary affairs of life, it is in civil jurisprudence irresponsible for its acts. He whose mind is so far overshadowed possesses no longer a disposing and consenting will. He is therefore incapable of making contracts, for a contract requires a concurrence of wills. When then one of the parties to a contract of marriage lacks the capacity of consent, there is no mutually binding promise, and the marriage is void. Whether, in a given case, such a disability existed as to render contract impossible, is generally declared, and the nullity of the marriage pronounced by competent judicial authority. But though the contracts of an insane man are necessarily void, he has not always been permitted to repudiate them. Until the time of Edward III. no objection seems to have been made to such a proceeding. Afterward the absurd maxim grew into a rule, recognized by the most eminent legal authorities, that no man

should be permitted to stultify himself. The strictness of the rule was gradually relaxed; not at first on the ground that lunacy was a defence in itself, but that it was competent evidence to show that undue advantage had been taken of a party, or that actual fraud had been practised upon him, by reason of his imbecility. This rule is now abandoned, and if one enters into a contract while he is deprived of reason he may avoid it when he recovers his sanity. Yet the exception is admitted that one may not plead his lunacy to annul his contract for necessities made with him in good faith by the other party; nor if, in fact, no advantage were taken of the lunatic, can a purchase made in good faith be rescinded, if injustice would thus be wrought to the other party, and both cannot be placed *in statu quo*.—A testament discloses the will of the testator; but when a disposing will fails, a testament is impossible, and the writing which purports to be one is a nullity. It is naturally very difficult to prove the existence of a lucid interval, far more difficult than to prove the existence of general insanity. It is sufficient for the purposes of the law that the mind appears to have been rational when the will was made. Indeed, the will itself may furnish strong, perhaps the best evidence of the lucid interval. If testimony can be adduced to show that the act was done without any assistance, and the writing itself discloses no marks of delusion or folly, no further proof can generally at least be required.—It has been already stated that the same degree of incapacity which invalidates civil acts, does not exempt from criminal responsibility. When insanity is pleaded to a charge of crime, the real question which the law entertains is: Was there a criminal intent; was the accused capable of that criminal will which is the essence of the offence? From the nature of the case the law has found it difficult to answer these questions; and perhaps it has not always answered them well. The doctrine of Sir Matthew Hale has exerted a large influence on the course of English decisions. He was disposed to determine the criminal responsibility of a mind affected with insanity by its strength and capacity; and said: "Such a person as, while laboring under melancholy distempers, hath yet ordinarily as great understanding as usually a child of 14 years old hath, is such a person as may be guilty of treason or felony." But such a rude test could not be permitted when juster views of mental disease had come to prevail among scientific men; and accordingly we find the nicety of the test a little advanced when the inquiry became whether the accused had so far lost the use of his understanding as not to know right from wrong. With the single qualification that this test should be applied to the particular act committed, this criterion has been long in use, with only slight and immaterial variations, in the English criminal law. It was laid down in *Bellingham's case*, by Sir James Mansfield, in 1812. In that case the

court went to what is now considered an extreme length, and instructed the jury that if a person affected by that species of insanity in which the patient fancies the existence of injury and seeks an opportunity of gratifying his revenge by some hostile act, be yet capable in other respects of distinguishing right from wrong, this would be no excuse for any act of violence which he might commit under this species of derangement. So Baron Rolfe, in the case of the queen against Stokes in 1848 (and he was quoted and followed by Baron Parke in *Barton's case* in the same year), said the subject had been lately carefully considered by the judges, and the law was now clear; every man is responsible for his acts by the law of his country if he can discern right from wrong. In the trial of Pate (1850) for an assault upon the queen, in which an uncontrollable impulse was urged in defence, Baron Alderson said in summing up: "It is not because a man is insane that he is unpunishable; and I must say that upon this point there exists a very grievous delusion in the minds of medical men. The only species of insanity which excuses a man for his acts is that species of delusion which induced to, and drove him to the commission of the act alleged against him. The jury ought to have clear proof of a formed disease of the mind; a disease existing before the act was done, and which made the accused incapable of knowing at the time that it was a wrong act which he was about to commit. The law does not acknowledge the doctrine of an uncontrollable impulse, if the person was aware that the act which he contemplated was wrong. The question you have to decide is: Was the accused at the time suffering from a disease of the mind which rendered him incapable of judging whether the act he committed was a right or a wrong act?" In one class of cases the test of responsibility is therefore to be, whether the prisoner knew that the act which he committed was wrong, and right and wrong in these cases are probably to be understood as Lord Brougham explained them in *McNaghten's case*, viz.: right must be understood of right according to the law, and wrong of an act condemned and punishable by law.—Another class of cases is that in which responsibility is modified by the existence of delusion. This form of insanity was first brought before and recognized by the courts in the celebrated case of *Hatfield* in 1800. In that case the prisoner was put upon his trial for firing at the king. Mr. Erskine defended him successfully, and procured the acquiescence of the court in his views of the irresponsibility of the accused. *Hatfield* labored under the delusion that it was his duty to sacrifice himself for his fellow men, and he conceived that the best mode to draw upon himself the punishment of death was to make an attempt upon the life of his sovereign. It was not denied that *Hatfield* knew right from wrong, and that the act which he contemplated was punishable

by the law; indeed, it was just that which he did know and directly contemplated; yet so powerful was his delusion, that the act which it prompted could not be said to proceed from the motion of his own free will. So clearly and forcibly did Mr. Erskine present the grounds of the defence, that the court, Lord Kenyon, advised the withdrawal of the prosecution, and the argument of the eminent counsel became a precedent and authority in the law. This same plea of delusion was successfully urged for Martin, who set fire to the minster of York, in obedience, as he said, to the command of Heaven. In 1848 the English law upon this matter was set forth in the case of *McNaghten* by the judges in the house of lords. This opinion, emanating as it does from the highest authority and pronounced upon deliberation, deserves great respect. The judges say that if there be only a partial delusion, and the party is not in other respects insane, he must be considered in the same situation as to responsibility as if the facts with respect to which the delusion exists were real. For example, if, under the influence of such a delusive idea, one supposes another to be in the act of attempting to take his life, and he kills that other, as he supposes in self-defence, then he would be exempt from punishment. But if the delusion were that the deceased had inflicted a serious injury upon his character and fortune, and he therefore killed him in revenge, then the aggressor must be held guilty. It was also the opinion of the judges that, notwithstanding a party accused did an act which was in itself criminal under the influence of insane delusion, with a view of producing some public benefit, or of redressing some supposed wrong, yet he was responsible if he knew that he was acting contrary to the law of the land. In *Massachusetts*, in the well known case of *Rogers*, which has been approved in other states, delusion was admitted to be a legal test of insanity. It was there held that if a party under a real and firm though insane belief do an act which would be justifiable if the imaginary fact existed, then he is not responsible.—The tests already considered, namely, the consciousness of right and wrong and delusion, apply to the intellectual faculties alone. But the moral faculties, not less than the intellectual, may become deranged. Passions and propensities may be so extremely developed as to destroy the balance of the mind and defeat the supremacy of the will. This condition of mental disorder, moral insanity, as it is called, has received a partial recognition by the law. The nicer degrees of it, for which medical men contend, have not found so much favor in the eyes of the courts. When the claim of indulgence for this sort of mental infirmity has been plainly reasonable, it has however been admitted and favored. This has been the case in respect to that form of insanity known as homicidal mania. The perpetrator may be perfectly capable of distinguishing right from wrong, not only

abstractly, but also in reference to the particular act. Further, there may be, in fact generally, no delusion in respect to the victim. The act is the offspring of an uncontrollable impulse; the party knows the nature of the act which he is about to commit, but has not the power to choose otherwise than as he does; and because the will is not here concerned, the homicide is not answerable for his act.—So far then as adjudicated cases go, insanity is admitted as a good plea: 1, when at the commission of the act the offender was incapable of distinguishing whether it was right or wrong; 2, when the act was done under a delusion in respect to the existence of facts which, had they actually existed, would have constituted a good defence; and 3, if the act were committed under the influence of mental disease great enough to overpower the will, though neither delusion nor any like provocation of the act be discovered.

LUNAR CAUSTIC. See NITRATE OF SILVER.

LUND, a town of Sweden, in the laen of Malmö, on an extensive plain, about 8 m. from the Baltic, and 21 m. E. from Copenhagen; pop. 5,298. There are several tanneries and woollen manufactories in the town. The cathedral is a large irregular edifice, said to have been founded in the 11th century and enlarged at different periods. In size it is the third church in Sweden. Measures were recently taken to restore and complete it. There are two other churches. The object of interest at Lund is the university, the only one in Sweden except that at Upsal. It was founded in 1479, and has a library of 30,000 volumes, and several museums and collections of natural history and mineralogy. Pufendorf was professor of the law of nature and of nations in this university in 1670. Lund is a place of great antiquity, and in pagan times is said to have had 80,000 inhabitants. In the middle ages it was the seat of an archbishop who was considered the primate of the north, and the Scandinavian monarchs were formerly elected upon a hill about half a mile from the town. A great battle was fought here between the Danes and Swedes, Dec. 1, 1676, in which 10,000 men were killed. A treaty concluded here terminated the war 8 years later.

LUNDY, BENJAMIN, an American abolitionist, born in Handwich, Sussex co., N. J., Jan. 4, 1789, died in Lowell, La Salle co., Ill., Aug. 22, 1839. Both his parents were members of the society of Friends. Until 19 years of age he labored upon his father's farm, after which he removed to Wheeling, Va., where he remained 4 years, working the first 18 months as an apprentice to a saddler. At this place his attention was first directed to the subject of slavery. On leaving Wheeling he went to Mt. Pleasant, Ohio, where he remained two years. He subsequently settled in business in St. Clairsville, Va., where in 1815 he originated an anti-slavery association, called the "Union Humane

Society," and wrote an appeal on the subject of slavery. Soon after a journal entitled "The Philanthropist" was commenced at Mt. Pleasant, to which Lundy contributed. He then visited St. Louis, where he remained nearly two years engaged in a newspaper exposition of the slavery question. During this time he lost the few thousand dollars his previous industry had accumulated. Returning to Mt. Pleasant, he commenced, in Jan. 1812, the publication of the "Genius of Universal Emancipation," the office of which was soon removed to Jonesborough, Tenn., and thence to Baltimore in 1824. In 1825 he visited Hayti to make arrangements for the settlement of emancipated slaves. In 1828 he visited the eastern states, where he formed the acquaintance of a number of prominent abolitionists, one of whom, William Lloyd Garrison, afterward became associated with him in editing his journal. In 1828-'9 he was assaulted for an alleged libel, indirectly censured by the court, and soon afterward removed to Washington. In 1830-'31 he travelled in Canada and Texas to obtain subscribers to his paper, and to continue his observations on the condition of the blacks. He made a second trip to Texas in 1833, returned the following year, and immediately afterward undertook another journey to Texas and Mexico. He continued his literary connection with the "Genius of Universal Emancipation" as long as it was published, and was the first to establish anti-slavery periodicals and the delivery of anti-slavery lectures, and probably the first to induce the formation of societies for the encouragement of the produce of free labor. "The Life, Travels, and Opinions of Benjamin Lundy," by Thomas Earl, was published in Philadelphia in 1847.

LUNDY'S LANE, BATTLE OF, called also that of Bridgewater or Niagara, a severe engagement fought in Canada, near the falls of Niagara, between the British and American forces, July 25, 1814. Two days after the defeat of the British under Gen. Riall at Chippewa by Brig. Gen. Scott, July 5, 1814, the American forces under Gen. Brown, numbering about 3,000 men, crossed the Chippewa river and took post at Queenstown; Riall, after throwing a portion of his force into Fort George, retreating to a strong position near the head of Lake Ontario. Occasional skirmishes took place between the outposts of both armies; but Brown, finding that he had no battering cannon to besiege Fort George, and being unwilling to leave that fortress in his rear, fell back after a few days to the Chippewa. Here on the 25th he received intelligence that Gen. Drummond, who had reached Fort George with British reinforcements, had crossed the Niagara river at Queenstown to attack Fort Schlosser, where the American supplies were deposited. Scott was at once detached with 1,200 men to make a demonstration on Queenstown, and about sunset unexpectedly came up with Riall and his whole

force advantageously posted on an eminence at the head of Lundy's lane, and in the immediate vicinity of Niagara falls. Although greatly outnumbered, the American general determined to hold his ground if possible until the main body of the army under Brown could arrive upon the field, and at once commenced the offensive by sending Major Jessup with a battalion to turn the enemy's left. His small force in the mean time was compelled to sustain the full fire of the British infantry and of a battery of 7 pieces, consisting of 24-pounders and howitzers, which crowned the heights, and at every discharge made deep chasms in the American ranks. Animated by the courageous bearing and buoyant spirits of their commander, the regiments maintained their ground unflinchingly, and were presently cheered by the intelligence that Jessup had been completely successful in his manœuvre, and had captured Gen. Riall and his whole staff, who were immediately sent to the rear. Soon but one American regiment, the 9th, remained in front, and this made feeble resistance against the British battery, now augmented, by the arrival of reinforcements under Drummond, to 9 pieces. The enemy, though numbering upward of 4,000 men, nevertheless refrained from charging Scott's exhausted battalions, which they might by the mere force of numbers have easily overpowered. At this critical moment the main body of the American army, which Brown, alarmed at the heavy and continued cannonade, had hurried forward without waiting for a message from Scott, arrived upon the field on a run, and Gen. Ripley's brigade at once went to the front, while the remnant of Scott's soldiers were formed in a single battalion in the rear. The evening was now far advanced, and notwithstanding the moon was shining in an unclouded sky, an almost complete darkness enveloped the field, broken only by the flashes from the British guns, and from the irregular discharges of musketry on either side. A pause presently ensued as each army prepared for a decisive blow, and Brown, gaining a partial view of the heights occupied by the British guns, as the clouds of smoke rolled away from the field, determined as the only chance of winning the battle to make an attempt to carry the battery. Turning to Col. Miller, he asked him if he could take it. "I'll try, sir," replied Miller, and, placing himself at the head of the 21st regiment, supported by the 23d under Major McFarland, he commenced the ascent of the hill. Guided by Scott, the column pressed swiftly and silently forward in close order, and had nearly reached the summit when their muffled tread announced their approach. At this moment a sheet of flame burst from the battery, and a fearful discharge of grape caused the 23d to recoil, while a second discharge drove them in disorder down the hill. But the 21st never faltered. Closing up their ranks after every volley, they held their course unswervingly until within musket shot of the battery, when, pouring in a volley,

they charged with a shout, bayoneted the artillerymen at their guns, and after a fierce struggle drove the enemy in confusion down the hill. The 23d, which had rallied under McFarland, arrived at this juncture, followed by the remainder of Ripley's brigade, and the Americans prepared to maintain the hill so heroically won. Soon the British column was heard ascending the slope, and after a volley from both sides a desperate hand-to-hand fight was maintained for 20 minutes around the captured guns, resulting in the complete discomfiture of the British, who fled precipitately under cover of the darkness. After the lapse of half an hour they returned, but were again driven down the hill, Scott with his battalion charging them effectually in the flank. Scarcely an officer now remained unwounded in the American ranks, and the men, faint with their exertions and tormented by thirst, were ready to sink with exhaustion. Unwilling, however, to relinquish the field, they replenished their ammunition from the cartridge boxes of their fallen comrades and foes, who covered the ground around the battery, and then calmly awaited the return of the British. After an hour's pause the latter, reinforced by fresh troops from Fort George, advanced under Gen. Drummond to the third and last assault. The conflict which ensued was more deadly than ever; for half an hour the hill seemed one blaze of fire, and friend and foe were mingled in almost inextricable confusion. At length the enemy, broken and foiled at all points, retired for the third time, and "a profound silence ensued, interrupted only by the groans of the wounded and dying, and the monotonous roar of the great waterfall, moaning, as it were, over this fatal scene of fraternal strife and military glory." Brown and Scott being now disabled by wounds, the command devolved upon Ripley, who, finding the enemy indisposed to renew the attack, drew off his troops to the camp. The captured guns, owing to the want of horses and the exhausted state of the men, could not be removed from the field, and when a detachment was sent back to secure them it was found that the hill had been reoccupied by the British. In this battle, the most obstinately contested perhaps ever fought upon the American continent, the British force, beside greatly outnumbering their opponents, had the advantages of position and preparation. Against these odds the troops of Brown fought with a valor and obstinacy unparalleled in the war, and which did much to disabuse the country of the idea, then prevalent, that American troops could not cope with the trained veterans of Europe. According to the official accounts, the Americans lost in killed and wounded 748 men, and the British 878. Ripley, finding his forces reduced to less than 2,000 effective men, retired to the neighborhood of Fort Erie, having first destroyed the bridge over the Chippewa and a portion of his stores.

LÜNEBURG, a province of Hanover, bound-

ed N. by the Elbe (which separates it from Hamburg, Holstein, Lauenburg, and partly from Mecklenburg), E. by the Prussian provinces of Brandenburg and Saxony, S. by Brunswick and Hildesheim, and W. by the province of Calenberg; area, 4,800 sq. m.; pop. in 1858, 858,701. The highest land between the two principal rivers, the Elbe and the Aller, is the Lüneburg heath, a very desolate spot. The other parts of the province are also mostly covered with heath, turf, moors, and forests, chiefly of fir. Along the river banks there is some fertile marsh land, but the corn raised is not sufficient for consumption. Flax and turnips are largely cultivated, and also to some extent hops, potatoes, and vegetables, but very little fruit. The breeding of cattle yields better returns than the tillage of the soil; sheep abound, and the breed of horses is much improving. Timber for building and fuel abounds in the forests. Gypsum is found in many places, in the vicinity of saline springs. The chief means of subsistence of the inhabitants are afforded by the forests, and by bilberries, juniper berries, and cranberries, of which large quantities are exported. The heath is so well adapted to the breeding of bees, that thousands of beehives are sent to Lüneburg from other parts of the country. The manufactures are confined to yarn, linen, hosiery, and wooden carvings. Lüneburg was in ancient times an allodium of the house of Brunswick. In 1235 it became a duchy, together with Brunswick. Afterward it formed a distinct principality, and eventually was allotted to Hanover.—LÜNEBURG, the capital, is situated on the Ilmenau, 82½ m. by railway N. N. E. from Hanover, and 24½ m. S. E. from Harburg; pop. 13,000. It retains the aspect of antiquity, and contains a town hall (*Rath-Haus*), noted for its fine relics and works of art. There are manufactories of sugar, salt, tobacco, &c. Nearly 70,000 horses are annually brought to the market.

LUNENBURG, a S. E. co. of Va., bounded N. by the Nottoway and S. by the Meherrin river; area, 410 sq. m.; pop. in 1850, 11,692, of whom 7,187 were slaves. The surface is generally level and the soil moderately fertile. The productions in 1850 were 49,960 bushels of wheat, 240,065 of Indian corn, 2,284,668 lbs. of tobacco, and 15,689 of wool. There were 7 grist mills, 6 saw mills, 3 tanneries, 20 churches, and 450 pupils attending public schools. Capital, Lewistown.

LUNÉVILLE, a city of France, capital of an arrondissement of the same name, in the department of Meurthe (Lorraine), situated on the right bank of the Meurthe, near its junction with the Vezouse, 240 m. by railway E. from Paris, 73 m. W. from Strasbourg, and 20 m. S. E. from Nancy; pop. in 1856, 11,969; of the commune, 15,801; and of the arrondissement, 83,614. Lunéville contains the largest cavalry barracks (accommodating over 6,000 horses) and the finest riding school in France. Vast bodies of cavalry are frequently collected there in

the autumn, when military exercises are practised. Under Louis XIII. it was taken from the house of Lorraine by the French. A treaty of peace was signed there, Feb. 9, 1801, between the German empire and France.

LUNGS, in man and in most of the vertebrated animals, the principal organs of respiration. The thoracic cavity (the chest) is chiefly filled up by the lungs and the heart. There are two lungs, one in the left, the other in the right side of the chest. Between them are placed the heart, the great blood vessels that spring from this organ, the œsophagus, the thoracic duct, &c. The left lung is smaller than the other. The two lungs are united together by the branches of the trachea, which is a large tube in continuation with the larynx. The lungs are a mass of ramified tubes, branches of the trachea, through the walls of which all the blood of the body passes to receive oxygen and to give away carbonic acid. In all air-breathing vertebrata, the atmospheric air reaches the larynx through the nasal and the buccal cavities, then passes into the trachea, and into its ramifications which are called *bronchi* or bronchial tubes, and from these tubes into membranous pouches named *alveoli*. The lung substance is composed of the alveoli, the air sacs, the small bronchi, blood and lymphatic vessels and nerves; the whole enclosed in a membrane that surrounds each of the lungs and is known as the *pleura*. Before giving a description of the intimate structure of the lungs, we will say a few words of the trachea and large bronchi.—The trachea, or windpipe, extends from the lower part of the larynx, of which it is the continuation, to the middle of the thorax, where it divides into the two large bronchi. It is situated in the middle line of the body, in front of the last cervical and the first 5 or 6 dorsal vertebrae. According to most anatomists, the branching of the trachea takes place at the level of the 3d dorsal vertebra; but Dr. Waters affirms that the spot where the branching is usually found is at the lower border of the 5th or the middle of the 6th dorsal vertebra. The length of the trachea is about 4 or 5 inches. The average transversal diameter of this tube is between 9 and 12 lines in adults. The anterior two thirds of the trachea is cylindrical, the posterior third is a flattened wall. In the neck the trachea is covered by the skin and a few flat muscles; in the chest it is placed between the two lungs and covered by muscles, lymphatic glands, and the bony and cutaneous walls of the thorax. The structure of the trachea is complicated. This tube is essentially composed of an internal layer which is a mucous membrane and an external one which is fibrous. Imbedded in these membranes are from 16 to 20 cartilaginous pieces, with the shape of a horse shoe, or of a ring one third of which is missing. These incomplete rings are placed transversely at nearly equal distances one from the other; they give to the anterior two thirds of the trachea the cylindrical form.

They keep the trachea widely opened, which of course would not be the case if this tube was simply membranous. In the back part of the trachea, between the extremities of the cartilaginous rings, there are transversal muscular fibres of the unstriated variety. The fibrous tissue found in the trachea belongs to the two varieties of yellow elastic and white fibres. The mucous membrane is a thin one, in perfect continuity with that of the larynx and that of the bronchi. Its most remarkable feature is that its epithelial covering is composed of ciliated cells presenting the vibratile movement in a high degree. A great many mucous glands exist all along the trachea, especially upon its back part. The bronchi, or rather the large bronchi, are the two ramifications of the trachea, from which they spring at an obtuse angle, each of them going into the lung of the corresponding side. The cartilaginous rings, the muscular tissue, the fibrous layer, the mucous membrane, &c., of the bronchi very much resemble the same parts of the trachea in shape and structure.—The lungs are united with the heart and with the trachea by a part called the root, which, in each side, is composed of the large bronchus, a branch of the pulmonary artery, two pulmonary veins, and smaller vessels and nerves, the whole being almost completely covered by the pleura. Each lung is divided into lobes, 2 in number in the left one and 3 in the other. The weight of the lungs varies much according to age and sex. In adult men the two lungs weigh from 40 to 50 ounces, and in women from 28 to 35 ounces. The ratio of the weight of the lungs to that of the body is as 1 to 30 or 40. The specific gravity of the lungs is very slight, and, unless the air has been expelled from the cavities of the bronchial tubes and of the alveoli, any part of the lungs dipped into water will rise and float. Each lobe of the lungs is divided into lobules, which are arranged on the bronchial tubes like grapes on a bunch. Each lobule is surrounded by condensed areolar tissue mixed up with yellow elastic tissue. Each lobule is a fair representation, on a small scale, of a whole lung, as it hangs upon a bronchial tube, a branch of the pulmonary artery, branches of bronchial vessels, and nerves. In the roots of the lungs the two large bronchi divide, the right into 3, and the left into 2 bronchial tubes, one for each of the pulmonary lobes. The primary bronchial tubes are very short, and divide into 2 or 3 smaller tubes, each of which gives off 2 or 3 divisions. Before reaching their termination, the tubes branch off 4 or 5 times more. Usually the branching of each tube, whether primary, secondary, or tertiary, &c., is only into 2 divisions, sometimes into 3, and more rarely into 4 or 5. The terminal twig of a bronchial tube is a small canal, in which are found many openings or orifices of very short tubes, which are the ultimate ramifications of the tube. At the sides and extremities of these ramifications, as also at the further point of the terminal twig, to which they are appended, honeycombed

cavities are found which are known as air vesicles, or air cells. These cells are the essential parts of the lungs; it is in them that the function of respiration is performed. We owe the best description of the air cells to Dr. A. T. H. Waters, who calls them air sacs. According to him, they consist of somewhat elongated cavities, which communicate with a bronchial ramification by a circular opening, which is usually smaller than the cavity of the sac. The air sacs are arranged in groups, and separated from each other by thin walls. Many small, shallow, cup-like depressions, separated from each other by portions of membrane, are found at the bottom and on the lateral walls of the air sacs. These small cavities have been called alveoli by Rossignol. The alveoli have no communication with each other, except by their opening in the cavity of the air sac. Dr. Waters has lately confirmed the observation of most preceding anatomists, that an epithelial layer exists in the air sacs and the alveoli. In adults the diameter of the ultimate bronchial tube varies from $\frac{1}{16}$ to $\frac{1}{8}$ of an inch; that of the air sac, from $\frac{1}{16}$ to $\frac{1}{8}$; and that of the alveoli, from $\frac{1}{16}$ to $\frac{1}{32}$.—The lungs receive two kinds of blood vessels, one kind starting from the right side, the other from the left side of the heart. The pulmonary artery and its branches convey to the air sacs the blood that has come from every part of the body into the right auricle. The pulmonary veins convey back from the air sacs, into the left auricle of the heart, the blood that has taken the oxygen of the air and given off carbonic acid in the cavity of the alveoli. Another kind of blood vessels coming from the aorta (the bronchial arteries) convey blood from the left side of the heart to the various tissues of the lungs to serve for their nutrition. The bronchial veins bring back to the right auricle the blood that has served for the nutrition of the bronchial tubes. As the organs of respiration the lungs receive, through the pulmonary artery, all the blood of the body, which returns to the heart by the pulmonary veins; like every other organ of the body, the lungs receive from the aorta the blood that is to serve for their nutrition. The lungs are extremely rich in lymphatic vessels, but the lymphatic glands seem not to exist in their structure; many of these glands are found round the roots of these organs. Two kinds of nerves supply the lungs with their ramifications, which are very numerous, the sympathetic and the pneumogastric.—The function of the lungs is obvious from their structure; it is respiration. The structure is admirably fitted for this purpose, as it essentially consists in an immense number of small air chambers or sacs at the termination of small tubes, which all communicate with the atmospheric air through the bronchial tubes and the larynx; and as, on another side, the blood vessels conveying the blood to be submitted to respiration are distributed on the very thin membranes of the alveoli, so that the interchange of gases, which

constitutes respiration, can easily take place by endosmosis and exosmosis. (For other details on the anatomy and physiology of the lungs, see BLOOD, CIRCULATION, HEART, and RESPIRATION.)—Most of the diseases of the lungs are treated under specific heads, as ASTHMA, BRONCHITIS, CONSUMPTION, EMPHYSEMA, HÆMOPTYSIS, EDEMA, PLEURISY, PNEUMONIA; and we now have to notice some of rarer occurrence. Pulmonary apoplexy is practically always a result of heart disease, and especially of disease of the mitral orifice. Cancer sometimes attacks the lungs; most commonly this is secondary to the same disease occurring in some other organ. Primary cancer is exceedingly rare, is recognized with difficulty, and is uninfluenced by any known treatment.—In GANGRENE OF THE LUNG a portion of the lung tissue dies, giving rise to a peculiar gangrenous fetor of the breath and expectoration. The disease may be either circumscribed or diffuse. In the first case the gangrenous portion of the lung is more limited in extent, and is separated by a sharply defined line from the surrounding tissue; several of these gangrenous patches, isolated from each other, may exist in the same lung. In diffuse gangrene no line of demarcation exists, and the gangrene is apt to be much more extensive, involving the greater part of a lobe, or even the greater part of the whole lung. On examination after death, the affected portion of the lung is found either reduced to a gangrenous detritus, or soft, infiltrated, easily torn, discolored, and exhaling an intensely gangrenous odor. The attack is often first announced by the peculiar odor of the breath; cough supervenes, attended with expectorations of a dirty gray, brown, green, or blackish color. Sometimes hæmoptysis, particularly in children, is present. The patient loses flesh, the strength rapidly fails, the pulse becomes frequent and feeble, and the patient sinks, often dying of suffocation. On physical examination early in the disease, often nothing can be discovered, or only a mucous rhonchus confined to one portion of the lung; afterward more or less dulness on percussion is found over the same spot, with bronchial respiration mixed with the fine crepitant rhonchus of pneumonia; finally the signs of a cavity become evident. Gangrene of the lung has been attributed to inflammation of that organ; but the symptoms seem to indicate that gangrene is the primary disease, and pneumonia but a consequence. The disease is commonly fatal, though in the circumscribed form of gangrene patients sometimes recover. In the treatment, camphor and opium have been found of service, but our efforts must be mainly confined to maintaining the strength of the patient by tonics and a nutritious diet. In the homœopathic practice arsenic is relied on.

LUNT, GEORGE, an American lawyer, author, and journalist, born in Newburyport, Mass. He was graduated at Harvard college in 1824, studied law, and commenced practice in his native town. While preparing for the bar he was prin-

cipal of the Newburyport high school. He resided for some years in Newburyport, being several times a member of the state legislature, both as a representative and senator. He began to write and publish poetry at an early age. A small volume of his poems appeared in 1839, and was followed in 1843 by another entitled "The Age of Gold." In 1845 he delivered a poem before the Boston mercantile library association called "Culture," which was afterward published. In 1848 he removed to Boston, and in the following year was appointed by President Taylor U. S. district attorney for Massachusetts, and held the office till March, 1853. He has since published a volume of poems entitled "The Dove and the Eagle" (1851); "Lyric Poems" (1854); "Julia" (1855); "Eastford, or Household Sketches" (a novel), under the pseudonym of Westley Brooke (1855); and "Three Eras of New England, and other Writings" (1857). Since March, 1857, Mr. Lunt has been an editor of the "Boston Courier," a conservative journal. His latest publication was a small volume, comprising four articles which originally appeared in the above named journal, entitled "Radicalism in Religion, Philosophy, and Social Life" (1858).

LUPERCALIA, the ancient Roman festival of purification and expiation, celebrated annually on Feb. 15 (whence the name of the month, from *Februa*, another name for the festival), in honor of Lupercus (surnamed Februs, from *februum*, a purgation), the god of fertility. The appropriate sacrifices were goats and dogs, after the offering of which two patrician youths were led forward to the altar, and one of the priests touched their foreheads with a sword dipped in the blood of the victims; another immediately washed off the stain with wool and milk. The priests next partook of a banquet, at which they were plentifully supplied with wine. This over, they cut the skins of the goats that had been sacrificed into pieces, with some of which they covered parts of their bodies, in imitation of Lupercus, who was represented half naked, and half clad in goat skins; with the other pieces, cut into thongs, they ran through the streets, striking every person whom they met, especially females, who courted the flagellation from an opinion that it averted sterility and the pangs of parturition. Antony, on the day when he offered Cæsar the diadem, was officiating as a priest of Lupercus. The ceremonies of this festival are supposed to have symbolized the purification of the people. The order of the Luperci, said to have been instituted by Romulus and Remus, formed a college of which none could originally be members save the noblest patrician youths. This college at first consisted of two classes, styled the Fabiani and Quinctiliani, to which Cæsar added a third named Juliani; and hence the two former classes are termed by later writers *Luperci veteres*.

LUPINE, the common name of a great number of beautiful plants, which are either annuals, perennials, or in some instances of a sub-shrubby character, natives of Europe, of the

countries around the Mediterranean sea, of the mountainous regions of the tropics, and of the temperate portions of North and South America. In Persoon's "Synopsis" (Paris, 1807) 20 species are enumerated. In Don's "History of the Dichlamydeous Plants" (London, 1832) 62 species are mentioned. There are figures of 66 species and varieties in the different botanical works quoted by Pritzel in his *Iconum Botanicarum Index* (Berlin, 1854). Torrey and Gray, in their "Flora of North American Plants," describe no fewer than 45 as belonging to North America. Several others are cited in Dr. Torrey's description of the botanical collections of the "Exploration, &c., for the Pacific Railroad" (vol. iv., 1856), and by Prof. Gray in his account of a collection of plants made chiefly in the vicinity of Santa Fé, New Mexico, by Augustus Fendler. The lupines are mostly sought after as handsome garden flowers, although the yellow lupine (*L. luteus*) and the white lupine (*L. albus*) are used as articles of food in the south of Italy, notwithstanding that the seeds are bitter; they are also eaten in Egypt, where they are called *embaben*, and are sold in the streets of Rome ready dressed. The seeds of *L. termis* are boiled for food by the Arabs, who also eat the raw peduncles (footstalks), after peeling them. The lupine seems wonderfully adapted to thin and poor soils, and to very barren places, which circumstance contradicts the presumed origin of the word lupine from *lupus*, wolf; as if wolf-like it exhausted and devoured the soil which supports it. Both Pliny and Columella tell us that crops of lupines were grown and afterward ploughed in by the ancient Romans, to make the soil better, as is the practice now in Tuscany and in the southern parts of France.—The most common lupine seen with us is the large annual species (*L. hirsutus*) from the south of Europe, having a tall, downy stem or stalk, and elegantly disposed, softly pubescent, many-parted leaves, large blue or rose-colored flowers, and large, flattened, concave-sided seeds. The field Peruvian lupine (*L. arvensis*, Bentham) is a half hardy perennial, growing from one to two feet high, with rich, lilac-blue and yellowish flowers, which appear in the autumn; it is increased by sowing the seeds, and it will grow in any good soil. A hardy perennial species from California is the broad-leaved lupine (*L. latifolius*, Agardh), with light purple flowers, and blooming from July to September, increased from seeds, or by division of its roots. Another from the same region is the parti-colored lupine (*L. versicolor*, Lindley), growing two feet high, with pink, purple, and white flowers, which appear in May and June. Its habit is decumbent, but it produces a great profusion of many-colored blossoms breathing a sweet perfume. The many-leaved lupine (*L. polyphyllus*) and its white variety (*L. p. albus*) are among the finest perennial sorts; and when, under cultivation, it is suffered to grow into a large clump, it will throw up a great quantity of spikes of ele-

giant blue or pure white flowers, attractive in a high degree. This is a common species at the mouth of the Columbia river and at Puget's sound. Several have yellow flowers, of which Menzies' lupine (*L. Menziesii*, Agardh), with verticillate flowers in a long spike, and the entire plant clothed with a silky pubescence, found by Douglass in California, may be mentioned. As far as the N. W. coast occurs a species (*L. Nootkatensis*, Don), and also a form of it in the Rocky mountains in lat. 55°, with flowers having a blue corolla variegated with red and yellow veins. Sabine's lupine (*L. Sabini*, Douglass) is said to be a very beautiful species, with a tall, striate, nearly glabrous stem, clothed with lanceolate leaflets silky on both sides, flowers verticillate in a dense, thick raceme, with yellow corollas; it is found on the Blue mountains in Oregon, and on the dividing ridge of the Rocky mountains near the confines of perpetual snow. Two species represent the genus more particularly, in the Atlantic states. One, found in the sandy barrens of North Carolina and Florida, is the *L. villosus* (Willd.), with unifoliate, large, densely silky tomentose leaves; very long linear-subulate stipules; flowers irregularly disposed in a long spike; handsome, bright, reddish purple corolla, which is deeply colored in the centre of the vexillum; legume very lanuginous, resembling a ball of silky wool enclosing 4 or 5 small variegated seeds. It grows in the driest sand. A species closely allied (*L. diffusus*, Nuttall) is reduced to a variety of this, the distinctions not being sufficiently specific. More widely diffused, and growing in light, sandy soil from Canada to Georgia, and at Behring's straits and on the shores of the Arctic sea (Richardson), is found the other species, known as the common wild lupine (*L. perennans*). Its stem is erect and somewhat hairy, its leaves are digitate, consisting of from 8 to 10 lanceolate wedge-shaped leaflets, arranged around the end of the petiole; its flowers, on a terminal spike, are blue, or sometimes rose-colored. The root is perennial, and throws up each successive season increasing flowering stems; it grows readily from the seeds. A natural patch of these charming plants overspreading a large area of sand, clothing the barren waste with beauty, cannot fail to attract the eye. Artificially propagated, the wild lupine succeeds best when raised from seeds, and in such cases blossoms in the 2d or 3d year. There are instances of varieties being met with having pure white flowers. The species having a shrubby stem is the tree lupine (*L. arboreus*, Sims), which will grow to the height of 6 feet. This species has been cultivated in England since 1796. Its flowers are of a pale yellow color and are fragrant. Mr. Nuttall conjectures that it may have been brought from California, the river lupine (*L. rivularis*, Lindley), having stems from 2 to 4 feet high, not being scarcely distinguishable from it, except in the color of its flowers (bluish lilac), and likewise found in California by Douglass and by Nuttall.

LUSATIA (Germ. *Lousitz*), an extensive region of Germany, now belonging in part to the kingdom of Saxony and in part to Prussia, but which formerly constituted the two margravates of Upper and Lower Lusatia, the former being the southern division. They were bounded N. by Brandenburg, E. by Silesia, S. by Bohemia, and W. by the duchy of Meissen; area about 4,200 sq. m., of which the southern part is mostly mountainous, rich in timber, and picturesque, and the northern level and fertile. The inhabitants are Germans and Wendes, the latter descendants of the ancient Slavic Luscii and Milzieni, and speaking a peculiar Slavic dialect. Lusatia was made tributary to the German empire in the earlier part of the 10th century by Henry I., and finally subdued and converted to Christianity by his successor Otho I. Its possession, however, was for many centuries an object of contention between the princes of Poland, Bohemia, Brandenburg, and Meissen. In the latter part of the 15th century it submitted to Matthias Corvinus, king of Hungary. After his death it was reannexed to Bohemia, with which it became subject to Ferdinand I. of Hapsburg, brother of the emperor Charles V., in 1526. Having revolted during the 30 years' war against the sway of Ferdinand II., it was subdued by John George, elector of Saxony, and ceded to him in 1635. By the treaty of Vienna of 1815 all Lower with a part of Upper Lusatia was ceded to Prussia, the former being annexed to the province of Brandenburg, and the latter to that of Silesia. The remaining part of Upper Lusatia forms the circle of Bautzen in Saxony. Görlitz, Luckau, and Guben are among the principal towns of Prussian Lusatia; Bautzen, Zittau, and Camenz, among those of the Saxon division.

LUSHINGTON, STEPHEN, an English statesman and jurist, born in London in 1782. He was graduated at All Souls' college, Oxford, of which he was for some time a fellow, and in 1806 was called to the bar at the Inner Temple. Two years later he was admitted an advocate at Doctors' Commons, and in the same year received the degree of D.C.L. at Oxford. He entered parliament in 1807, and during a lengthened legislative career, terminating in 1841, advocated the prominent measures emanating from the liberal party. At the same time he maintained a high reputation at the bar as a civilian, and was one of the counsel employed to defend Queen Caroline in the trial to which she was subjected after the introduction of the bill of pains and penalties against her. In 1828 he was appointed judge of the consistory court, and in 1838 judge of the high court of admiralty and a privy councillor, both of which latter offices he still holds. He is also chancellor of the dioceses of London and Rochester, and commissary of Westminster, Essex, and Herts, beside holding other minor offices.

LUSITANIA, the country of the people whom the Romans called the Lusitani, and in a wider sense the name of one of the 3 provinces

into which the Iberian peninsula was divided by Augustus. The Roman province occupied, like modern Portugal, the W. side of the peninsula, extending from Cape St. Vincent E. to the mouth of the Guadiana and N. to the Douro. It consequently did not include the N. provinces of Portugal, Entre Douro e Minho and Trás os Montes. Eastward in the interior it extended far beyond the boundaries of Portugal, embracing the N. part of the old Spanish province of Estremadura and the S. part of Leon. The country of the Lusitani, however, was much smaller than the province to which its name was given. In this sense Lusitania included only the region between the Tagus and the Douro, from the Atlantic on the W. to the present frontier of Portugal on the E. The province was anciently rich and fertile, and possessed valuable mines of gold and silver. Beside the Lusitanians, it contained several other tribes, of whom the most important were the Vettones, the Turduli Veteres, a branch of the Turdetani, and the Celtici, who were a remnant of the old Celtic population of the peninsula. The chief city of Lusitania was Olisipo, the modern Lisbon, which was always a place of importance, though the Romans made Emerita Augusta, the modern Merida, the capital of their province. The Lusitani, according to Strabo, were the greatest nation of the peninsula, and the one most frequently and longest at war with the Romans. They were a brave and turbulent race, and much addicted to brigandage, especially those who dwelt among the mountains. Under Viriathus they revolted, 158 B. C., and carried on for 14 years a gallant struggle against the Romans, who for a time were compelled to acknowledge their independence. Viriathus was finally assassinated by the Romans, and the subjugation of the Lusitanians was soon afterward effected.

LUSTRATION (Lat. *lustratio*, also *lustrum*), purification by sacrifices or other ceremonies. Originally ablution in water was the only rite observed by the Greeks, but afterward sacrifices, &c., were added. They were employed both to purify individuals, cities, fields, armies, or states, and to call down the blessing of the gods. The most celebrated lustration of Greece was that performed at Athens, in the days of Solon, by Epimenides of Crete, who purified that city from the defilement incurred by the Cylonian massacre. A general lustration of the whole Roman people took place every 5th year, before the censors went out of office. On that occasion the citizens assembled in the Campus Martius, and the sacrifices termed *suovetaurilia*, consisting of a sow, a sheep, and an ox, were offered up, after being carried thrice round the multitude. This ceremony, to which the name *lustrum* was particularly applied, is said to have been instituted by Servius Tullius in 566 B. C., and was celebrated for the last time at Rome in the reign of Vespasian. The term was also applied to the period which intervened between the *lustra*, and, as that period consisted of 5 years, later writers occasionally use the word

lustrum to designate that space of time generally. All Roman armies were lustrated before they commenced military operations. The Roman shepherd at the approach of night adorned his fold with branches and foliage, sprinkled his sheep with water, and offered incense and sacrifices to Pales, the tutelary divinity of shepherds. Whatever was used at a lustration was immediately after the ceremony cast into a river, or some place inaccessible to man, as it was deemed ominous for any one to tread on it.

LUTE, a musical stringed instrument of the guitar species, formerly in general use, but long superseded by the harp and guitar. In shape it is not unlike the section of a pear. It is played like the guitar, and the music was written in tablature, but in so careless a manner that it is difficult to translate it into modern notation. It is supposed to be of eastern origin, and has been ascribed to the Arabs.

LUTE, or LUTING (Lat. *lutum*, clay), a soft adhesive mixture used in chemical operations for making tight the joints of an apparatus. Its ingredients vary according to the kinds of vapors to be confined, and the temperatures to which it is to be exposed. Fire-brick clay finely pulverized and made into a paste with water withstands the highest degrees of heat, and makes tight joints when carefully applied and gradually dried and baked. Fibres of asbestos are advantageously intermixed with the clay. Fat lute is very generally used where the temperature is not excessively high, and where the vapors to be confined are corrosive. It is made of pipe clay worked to a soft and ductile paste with linseed oil. It must be applied to perfectly dry surfaces, and may be strengthened by binding over it slips of bladder. Common putty may often be substituted for it. Hydraulic lime and plaster of Paris make very useful lutes for many purposes, especially when rendered impervious by washing them over with oil, or a melted mixture of equal parts of wax and oil. Caustic lime thoroughly worked into the white of an egg, laid on slips of cloth and thus applied over the junctions to be luted, firmly adheres like a cement. White lead and oil laid on slips of cloth, and paste and paper, or glue and paper, and linseed meal made into a paste with water, milk, lime water, or weak glue, all serve as lutes for special operations.

LUTHER, MARTIN, the leader of the German reformation, born in Eisleben, now a town of Prussian Saxony, on St. Martin's eve, Nov. 10, 1483, died in the same place, Feb. 18, 1546. His father was a poor miner, but an industrious, energetic, and sensible man; his mother a plain and pious woman. "I am a peasant's son," he says in his characteristic style; "my father, my grandfather, and my forefathers were all genuine peasants. Afterward my father went to Mansfeld, and became an ore-digger. . . . My parents were at first right poor. My father was a poor miner, and my mother carried her wood on her shoulders; and after this sort they supported us. their children. They had a sharp, bitter

experience of it; no one would work so hard now." Subsequently, however, his father, by persevering labor, acquired a house and two furnaces at Mansfeld, whither he removed six months after Luther's birth, and left at his death about 1,000 florins in money. The reformer was brought up under pious but severe and rough discipline. At school he was once flogged 15 times in a single forenoon. He calls the German schools of those days purgatories, and the teachers tyrants and taskmasters. All this is characteristic of the harsh and rude spirit of the age, and accounts for the rugged vigor and want of polish in Luther's character. While at school in Mansfeld he had to beg his bread with his companions by singing from house to house in the neighboring villages. "It is God's way," he says, "of beggars to make men of power, just as he made the world of nothing." His condition was not materially improved at the Franciscan school at Magdeburg, where he spent one year. From there he was sent to the Latin school at Eisenach, his favorite town. At first he had still to beg his bread by singing hymns in the street, and felt at times so discouraged that he nearly gave up study altogether. But a liberal lady, Ursula Cotta, took the poor boy, who had engaged her sympathy by his musical talent and earnest devotion in church, to her house, dispelling the gloom from his mind, and supporting him till he was prepared to enter the university of Erfurt in 1501 at the age of 18. Here he studied with great zeal and success the Latin classics and the scholastic (Aristotelian) philosophy, and was graduated in 1505 as M.A. His moral conduct during all that time was unblemished. His father, who in the mean time was able to assist him, intended him for the legal profession. But the sudden death of an intimate friend in a duel, and his own narrow escape from death, first by a severe illness, and then by lightning, which struck with terrific force on the ground near his feet on the road between Erfurt and Stotterheim, so strongly excited his religious feelings and filled him with so vivid a sense of the vanity of the world, that he resolved to forsake the world, and entered the Augustinian convent at Erfurt, July 17, 1505. Here he subjected himself to the severest monastic discipline and the humble services of sweeper, porter, and beggar. His deep mental conflicts, penances, and mortifications of the flesh seriously undermined his health and brought him to the brink of despair. The ascetic exercises led him more and more to a knowledge of his own moral helplessness, and to the cross of Christ as the only source of justification and peace. In this process he was greatly assisted by the study of the Bible, complete copies of which he first found in the university library, and in the convent at Erfurt, by the writings of St. Augustine, his favorite among the fathers, the sermons of the German mystic Tauler, the commentaries of Nicholas de Lyra (hence the saying: *Si Lyra non lyrasset, Lutherus non saltasset*), and the advice of his fatherly friend John

Staupitz, a practical mystic, and superior of the Augustinian order in Germany. The cloister of Erfurt may therefore be called the birthplace of Lutheran Protestantism and of the evangelical doctrine of justification by faith without the works of the law. "God ordered," says Luther, "that I should become a monk, that, being taught by experience, I might take up my pen against the pope."—Here closes the first period in Luther's life, his training for the reformation. We now enter upon his public career, which is so intimately interwoven with the productive period of German Protestantism that a history of the former is a history of the latter from 1517 to 1530. After having spent 8 years in the convent and taken orders (1507), Luther was called in 1508, at the instance of Staupitz, as professor of scholastic philosophy to the university of Wittenberg, which had been founded a few years before by Frederic the Wise, elector of Saxony, the cautious patron of Luther and the reformation, and was destined soon to acquire a world-wide reputation. In 1512 he took the degree of D.D. He lectured on theology, especially the Psalms and the Epistles of Paul, his favorite apostle, freely expressed his dislike for the dry and stiff formalism of the prevailing scholasticism, and led the students from ecclesiastical tradition to the fresh fountains of the Scriptures, and to the evangelical system of his favorite St. Augustine. But he had no idea of being in conflict with the genuine spirit of Catholicity. On the contrary, when in 1510 he made a journey to Rome in the interest of his order, he devoutly ascended on his knees the *scala santa* opposite the church of St. John Lateran, although an inward voice, as he declares, repeated the passage: "The just shall live by faith." It required, however, only the proper external occasion to call out the reformation as it was fully prepared, not only in the mind of Luther, but for centuries past in the Latin church at large, both negatively and positively, by the anti-Catholic sects, the movements of Wycliffe in England, Huss in Bohemia, Savonarola in Italy, Wessel and many others in Holland and Germany. This occasion was the abuses attending the promulgation of an indulgence under the authority of Pope Leo X. to all who, beside fulfilling other conditions, should contribute money for the rebuilding of the cathedral of St. Peter at Rome. The person intrusted with the dispensation of these indulgences in Saxony was a Dominican monk named Tetzel, who seems to have discharged his functions in a manner which many devout Catholics regarded as profane. He went far beyond the received doctrine of the Roman canonists of the age, and made the granting of ecclesiastical remissions little if any better than an open sale. Against this profanation of holy things Luther raised a bold protest in the famous 95 Latin theses which he posted up on the doors of the Schlosskirche at Wittenberg, Oct. 31, 1517. He enclosed a copy of them to the archbishop of Magdeburg, beseeching that

prelate to put a stop to Tetzel's scandalous practices. These theses, although submitting the entire controversy to the decision of the pope, contained nevertheless the germ of the Protestant doctrines. They spread with the velocity of lightning through the press, now for the first time turned to account in a popular agitation, and kindled a fire throughout the entire Catholic world of Europe. A sharp controversy followed; the attempts of ecclesiastical diplomacy to compromise the difficulty through Cajetan and Miltitz failed; the Leipsic disputation (July, 1519) between Dr. Eck on the one hand, and Carlstadt and Luther on the other, soon rekindled the fire and widened the breach. Luther hurled several violent and most effective pamphlets against Rome, especially his address to the German nobility (1520), and henceforth he hated and abhorred the whole system of Roman Catholicism as an anti-Christian despotism that held the church of God in captivity and obstructed the access of the believer to Christ. Thus he was led step by step, against his original intention, to a complete emancipation from the system in which he was educated. In all this crusade he was encouraged and supported by his university, his prince, and a large amount of growing popular sympathies, especially in the north of Germany. Leo X. was disposed at first to treat the whole controversy lightly, as a mere monkish quarrel between the Augustinians and Dominicans; but he felt himself compelled at last to issue, June 20, 1520, the bull of excommunication against the dangerous German heretic, who by his pen had shaken the church and the empire to the very base. Luther, surrounded by his students and colleagues, committed the papal bull, together with the canon law and several books of Eck and Emser, to the flames (Dec. 10, 1520) before the Elster gate of Wittenberg, exclaiming: "As thou (the pope) hast troubled the Holy One of the Lord, may the eternal fire trouble and consume thee." (Comp. Josh. vii. 25.) This bold act was the fiery signal of an irrevocable separation from the Roman hierarchy. A few months afterward he was summoned, by the newly elected German emperor Charles V., before the diet of Worms; and in spite of the remonstrances of timid friends, he resolved to go, though "there were as many devils there as there are tiles on the roofs of the houses." On entering the city (where a magnificent monument to his memory is now (1860) in the course of erection), more than 2,000 persons accompanied him to his quarters. When confronted with the brilliant assembly of the emperor, the princes and nobles of the empire, the dignitaries of the church, and an immense concourse of spectators, and called upon to recant, he boldly defended his doctrines, and made the memorable declaration (April 18, 1521): "Unless I shall be refuted and convinced by testimonies of the Holy Scriptures, or by public, clear, and evident arguments and reasons, I cannot and will not retract any thing, since I believe neither the pope nor the councils alone

—both of them having evidently often erred and contradicted themselves—and since it is neither safe nor advisable to do any thing against the conscience. Here I stand, I cannot otherwise; God help me! Amen." Thus the Bible, his conscience, and private judgment were the three powers to which he appealed against tradition, the pope, and the councils. When the solitary monk entered the hall of the diet, Freundsberg, one of the ablest military commanders of the age, tapped him on the shoulder and justly said: "Monk, monk, thou art on a passage more perilous than any which I and many other commanders ever knew in the bloodiest battle fields. If thou art right, fear not; God will sustain thee." The diet subsequently pronounced the ban of the empire against Luther, and he was now an outlaw before church and state.—With Luther's appearance at Worms culminates his opposition to Rome, or the first and negative act of the reformation. The third period of Luther's life, which reaches from the diet of Worms (1521) to the diet of Augsburg (1530), embraces his positive labors in constructing and organizing the new church on the scriptural basis, in opposition not only to papal authority, but also to ultra Protestant radicalism and fanaticism. On his return to Wittenberg he was protected by the agents of Frederic the Wise, and lodged in the castle of the Wartburg, near Eisenach in Thuringia. In this romantic solitude, which he called his Patmos, he spent 10 months under the assumed name of "Knight George," hunting, praying, issuing tracts, and translating the New Testament, until the outbreak of serious disturbances among his own followers induced him to return to Wittenberg (March, 1522) in spite of the remonstrance of his prince. He preached a series of sermons in favor of order, authority, moderation, and charitable forbearance, and thus allayed the radical movement, headed by his older colleague, the earnest but fanatical Carlstadt, which threatened to defeat the cause of the reformation by turning it into a chaotic revolution. He took a similar conservative stand against the Anabaptists and the political ultra Protestantism in the peasant war, which rose like a dark pillar of smoke from the flame of the reformation, and ended in the more complete subjugation of the German peasantry by their temporal and spiritual masters. The cruel advice attributed to Luther to kill the rebellious peasants "without mercy like mad dogs" was at any rate executed, and the premature movement in favor of political freedom was quenched in 1524. Since that time Protestantism in Germany has been strongly conservative and monarchical in politics, while in Switzerland, France, Holland, and England it has favored and promoted political liberty. In the midst of these disturbances Luther suddenly married, in his 42d year (June, 1525), to the great surprise of his friends, an ex-nun, Catharina von Bora, in order "to please his father, to tease the pope, and to vex the devil." The marriage was upon

the whole a happy one. Luther speaks of his "Katy" as an obedient, pious, and good wife, whom he prized "above the kingdom of France, or the state of Venice." The most important labors of the reformer between 1521 and 1530 were his translation of the Bible, his sermons, hymns, and chorals for divine service in the vernacular tongue, his larger and shorter catechism, both of which acquired symbolical authority, and his efforts in behalf of common schools and popular education. He defended the establishment of such schools, partly by taxation, partly by the funds of the monasteries, with the strongest and clearest arguments derived from the duty of parents and of the state, the Bible, and the highest considerations of public virtue and religion. "It is a grave and serious thing," he says, "affecting the interests of the kingdom of Christ and of all the world, that we apply ourselves to the work of aiding and instructing the young. . . . Why else do we elder persons live, but to take care of the young, to teach and train them? It is not possible that giddy childhood should provide for its own instruction. Therefore God hath committed them to us who are old and have experience, and he will call us to a strict account. . . . This is not only the duty of parents, but also of the state and the church. How can reason and charity allow the youth to grow up uneducated to become a poison and pestilence, corrupting a whole town?" He regarded the office of a teacher, next to preaching, as the most important and useful vocation. "I am not quite sure which of the two is the better; for it is hard to reform old sinners, with whom the preacher has to do, while the young tree can be made to bend without breaking." It is necessary to add that he viewed domestic and public education always in close connection with religion and the church. In 1529 he attended the fruitless theological conference at Marburg to bring about a union between the Lutherans and Zwinglians, but declined the overtures of brotherhood made by the less rigid Swiss reformer, on account of the difference existing between them in their views on the Lord's supper. He claimed and exercised the full right of private judgment against bishops, popes, and general councils, but refused it to others who conscientiously differed from him, and had the same veneration for the Word of God as he. Born to rule and accustomed to lead opinion, he was impatient of contradiction, and overbearing in disposition. During the diet of Augsburg in 1530, where the "Augsburg Confession," the most important symbolical book of the Lutheran church, was composed by Melancthon and presented to the emperor, Luther remained at the castle of Coburg, watching the progress of events, and encouraging his timid and often desponding friend Melancthon.—The fourth and last part of Luther's life, from 1530 to 1546, is less important for the general course of the Protestant movement, which in the mean time had far outgrown its individual and sectional proportions,

and presents less biographical unity and interest to the general reader. He continued, however, his labors as professor, preacher, and writer, without interruption, and took a leading part in the public events of his country. In 1534 he completed the translation of the whole Bible, the work of 12 years. In 1536 he assented to a temporary agreement with the Swiss Protestants, but soon afterward renewed the sacramental war with great vehemence, and refused fellowship with all who denied his doctrine of the Lord's supper. In 1537 he drew up in a strongly anti-papal spirit the "Articles of Smalcald," intended for the often promised and long delayed general council. They were signed by the Lutheran princes and Melancthon (though with a qualifying clause by the latter), and became one of the symbolical books of the Lutheran church. He had no confidence in any compromise with Rome, and attended none of the conferences which vainly attempted to heal the great schism. In 1539 he committed the inexcusable mistake of giving his private though qualified consent to the disgraceful bigamy of Philip of Hesse. His latter years were frequently obscured by sickness, irritable temper, gloomy spirits, death of friends and relatives, dissatisfaction with public affairs, differences among his followers, and the warlike prospects of Germany. In Dec. 1544, he wrote to a friend: "I am worn out and discontented; that is, I am an old man and no more of any use. I have finished my course; there remaineth only that God gather me to my fathers and give my body to the worms." He complained bitterly of the rudeness, impiety, and immorality of his age, and thereby revealed the defect of his reformation, the want of congregational organization and moral discipline. In 1545 he was so dissatisfied with the people of Wittenberg on account of their luxury and vain amusements, that he left the town to spend the remainder of his days elsewhere; but at the entreaties of the elector and the university he returned. His last work was the completion of a commentary on Genesis, which he commenced in 1535 and concluded in Nov. 1545, with the words: "I am weak and can do no more. Pray God that he may grant me a peaceful and happy death." In Jan. 1546, he left Wittenberg with his three sons, John, Martin, and Paul, to settle a quarrel between the counts of Mansfeld and some of their subjects whom they wished to deprive of their furnaces. He reached Eisleben in poor health, preached four times, communed twice, ordained two priests, wrote serious and humorous letters to "the profoundly learned lady, Cath. Luth., his gracious housewife," and enjoyed the recollections of the place of his birth. His conversation in these days is said to have been unusually earnest, rich, and impressive. The last related to death, eternity, and the recognition of friends in heaven. On Feb. 17 he was seized with a painful pressure at the breast, and after fervent prayer and thrice repeating to his friends the inspired words (Pa. xxxi. 5): "Father, into

thy hands I commit my spirit; thou hast redeemed me, thou faithful God!" he quietly died with folded hands, between 2 and 3 o'clock in the morning of Feb. 18, 1546. His remains were removed in solemn procession to Wittenberg, and deposited in the castle church near the pulpit. Bugenhagen and Melancthon preached the funeral orations, and gave utterance to the universal grief of Protestant Germany over the departure of the Elijah of the reformation.—Luther's greatness is not that of a polished work of art, but of an alpine mountain with towering peaks, rough granite blocks, deep abysses, sweeping torrents, fresh fountains, and green meadows. Whatever he said and did, he said and did with all his might. His character is easily understood. Throughout his whole life he was an open-hearted, honest German. Dissimulation and cowardice were alike unknown to him. His virtues and faults lie on the surface, and we have nowhere to search for any secret or double motive in his conduct. He is the most faithful and original type of the German national character both in its strength and weakness. He was emphatically a man of the people, and to this day no other name carries such weight and authority with the masses in Protestant Germany, which reveres and loves him far more than Boniface, "the apostle of Germany." He had an extraordinary faculty of expressing the deepest thoughts in the plainest and most popular language, and many of his sayings have passed into proverbs. As a scholar and scientific divine he was inferior to Melancthon, and not to be compared with Calvin. He was no systematic thinker and logical reasoner, and his writings abound in paradoxes, inconsistencies, and contradictions. He always spoke out his first impressions and momentary convictions from the fulness of his mind and heart, regardless of consequences. Nor was he an organizing legislator and strict disciplinarian like Calvin. He contented himself with a reformation of the fundamental articles of faith, hoping that it would by its own force work out a reformation of conduct and public morals. He left the government of the church in the hands of the princes, who assumed and exercised the episcopal power. Some of his private habits, his love for wine and beer, his joviality and drollery, would have been regarded by the Geneva reformer as inconsistent with true Christian holiness; and the moral condition of the church of Wittenberg, when Luther left it in disgust in 1545, bears no comparison whatever with that of Geneva in 1564, which John Knox declared to be the most perfect school of Christ since the days of the apostles, and which afterward Valentine Andream held up to the Lutheran churches of Germany as a model for imitation. Luther never acquired a control over his violent temper and fierce passions. His wrath and indignation discharged itself in thunder and lightning; and in his controversial works against the Roman Catholics, the Sacramentarians, Henry VIII. of England, and Erasmus, he indulges

often in rude and vulgar invectives which no writer of the present day could use without losing the reputation of a gentleman. But we must take into account his want of refined training, the semi-barbarous character of his age, and the rough character of the work he had to perform. To use his own graphic language, he was "rough, boisterous, stormy, and altogether warlike, born to fight innumerable devils and monsters, to remove stumps and stones, to cut down thistles and thorns, and to clear the wild woods." And then it should always be remembered that beneath the strong armor of controversy Luther had a genial, kind, and generous heart. He never meant more than he said, and knew no revenge. A lion in public life, he was a lamb at home. He was eminently social in his disposition, a great lover of poetry and music, an affectionate husband and father. He liked to play with his children, and to gather with them in childlike joy around the Christmas tree. He wrote to his "Johnny" from Coburg in 1530, during the important proceedings of the diet at Augsburg: "Mercy and peace in Christ, my dear little son. I am glad to hear that you learn your lessons well and pray diligently. Go on, my child. When I come home I will bring you a pretty fairing. I know a very pretty, delightful garden, and in it there are a great many children, all dressed in little golden coats, picking up nice apples, and pears, and cherries, and plums, under the trees. And they sing and jump about, and are very merry; and beside they have got beautiful little horses, with golden bridles and silver saddles. The gardener told me: 'These are children who love to pray, to learn their lessons, and to obey.' Then I said: 'Dear sir, I have a little son called Johnny Luther; may he come into this garden too?' And the man said: 'If he loves to pray and learn his lessons, and is good, he may.'" In his letters to his wife and friends he lays open his whole heart, and gives free vent to his native wit, harmless humor, and childlike playfulness and drollery. His "Table Talk," though by no means all genuine, is one of the most interesting and entertaining of books, a singular mixture of the wildest paradoxes, conceits, superstitions, and freaks of fancy, with good sense, sound views, and excellent advice. Men of genuine humor are always serious at bottom, and often subject to mental gloom and melancholy. So was Luther, especially during his monastic life and his latter years. "The basis of his life," says Thomas Carlyle in his sketch of Luther in "Heroes and Hero Worship," "was sadness, earnestness. In his latter days, after all triumphs and victories, he expresses himself heartily weary of living; he considers that God alone can and will regulate the course things are taking, and that perhaps the day of judgment is not far. As for him, he longs for one thing: that God would release him from his labor and let him depart and be at rest. They understand little of the man who cite this in discredit of him! I will call this Luther a true

great man; great in intellect, in courage, affection, and integrity; one of our most lovable and precious men. . . . A right spiritual hero and prophet; once more a true son of nature and fact, for whom these centuries, and many that are to come yet, will be thankful to heaven." The controlling element in Luther's character and the motive power of all his writings and actions was his piety, his strong faith in God and unbounded enthusiasm for the gospel. He was emphatically a man of prayer, and lived in the Scriptures as few men ever did. In the doctrine of the church and the sacraments, and in matters of worship, outward organization, and usages, he adhered much more closely to the traditions of the Roman Catholic system than either Zwingli or Calvin; but in what constitutes the essence of Protestantism he was as decided as any of his fellow reformers. The absolute supremacy of God's word, and justification of free grace by faith alone, were the pillars of his theology and religion.—The works of Luther are partly in Latin, partly in German, and consist of sermons, commentaries on the Scriptures, especially on Genesis, the Psalms, and Galatians, polemical tracts against Roman Catholics, fanatics, Zwinglians, Erasmus, Henry VIII., &c., and a great many letters. He composed also a number of standard hymns and tunes, partly original, partly free versions and adaptations of Psalms and old Latin hymns; and he may be regarded as the founder of German church poetry and music, which is richer than that of any other nation. His most famous hymn is the *Ein' feste Burg ist unser Gott*, the war song of the reformation, written in 1529 on the basis of the 46th Psalm, and often rendered into English (by Carlyle, Mills, Miss Catharine Winkworth, Dr. Bunting, Massie, Heyl, and others). But his most important and useful work is his translation of the Bible, commenced in 1521, continued with the assistance of Melancthon, Bugenhagen (Pomeranus), and Cruciger, and completed in 1534. It threw all the previous German versions into entire forgetfulness, assisted immensely in the spread of the reformation, and in spite of its many obscurities and inaccuracies remains to this day in general use among the Protestant churches of the German tongue. It bears a similar relation to German literature to that which the common English version bears to English literature and church life. Though less accurate, it is a more gigantic work as to labor and perseverance, if we consider that it was made nearly a century earlier, almost single-handed, and without the aid of later grammars, dictionaries, and commentaries, while the English version is the product of the united labor not only of the 47 divines appointed by James I., but of three generations, as represented by Tynedale, Coverdale, Cranmer's Bible, the Geneva Bible, and the Bishops' Bible. Luther sometimes sat with his colleagues one and two weeks over a single obscure passage of the Hebrew Scriptures and the Latin Vulgate, and even employed butchers to dissect animals in his pres-

ence, that he might properly understand and accurately render the various sacrificial terms in the Levitical code.—We have 6 complete editions of Luther's works, of which the best are those of Walch (24 vols. 4to., Halle, 1740-'58) and Plochmann and Irmischer (68 vols. 8vo., Erlangen, 1826-'50). The latter gives the works in their original Latin or German, and adds all the writings which had appeared since Walch. The best and cheapest selection of his works, containing all his more important writings, with instructive introductions and notes, is the one edited by Dr. Otto von Gerlach (last ed., 24 vols., Berlin, 1859). Dr. Barnas Sears has published, with valuable philological notes, "Select Treatises of Luther," containing his first "Address to the German Nobility," his "Address in behalf of Common Schools," and his "Exposition of the 14th Chapter of St. John" (Andover, 1846), which may give the American reader a pretty good idea of the genius and style of the German reformer. The letters of Luther, which furnish the most authentic materials for an almost complete biography, were separately edited by Dr. De Wette (5 vols., Berlin, 1825-'8, to which a supplementary volume was added by Seidemann in 1856). The "Table Talk" was first collected by Auri-faber (1566), and then by Selnecker (1577). The best edition is by Förstemann and Bindseil (4 vols., Berlin, 1844-'8). Of the very numerous biographies of Luther we mention those by Melancthon, *Historia de Vita et Actis Lutheri* (1546); Mathesius, *Historie von Dr. M. Luther's Anfang, Lehre, Leben und Sterben* (1565); Selnecker (1575); Keil (1746); Ukert (1817); Stange (1835); G. Pfizer (1836); Jürgens (3 vols., 1846 *et seq.*), by far the most elaborate and learned of all, but not yet complete, reaching only from 1483 to 1517; Meurer (1850-'52), to a great extent in Luther's own words; König and Gelzer (1851; republished in New York, 1857, in the translation of Hare and Miss Winkworth). The French work of Audin, in 2 volumes (also translated into English), is written from a Roman Catholic point of view. The *Mémoires* by Michelet (Paris, 1857) are lively but superficial, and too much based upon the "Table Talk." The first volumes of Merle d'Aubigné's popular "History of the Reformation" are mostly occupied with Luther, and by their immense circulation have done more perhaps to spread a knowledge of his early life and labors in England and America than any other recent work. Of English and American writers, we must mention Thomas Carlyle, Coleridge, Archdeacon Hare (first in a very long note to his "Mission of the Comforter," afterward separately published), and Barnas Sears ("Life of Luther, with special reference to his Youth," American Sunday school union, Philadelphia, 1850), as those who have best understood and appreciated the character of the German reformer, and successfully vindicated him against the depreciating criticisms of Hallam, Sir William Hamilton, and several tractarian divines. Dr. Tulloch, also, in his "Leaders of the Reforma-

tion," republished in Boston (1859), gives a highly eulogistic sketch of Luther. The hymns of Luther have been translated by R. Massie, and in part also by H. Mills, in *Hore Germanica*, and Miss Catharine Winkworth in the two series of *Lyra Germanica*, republished in New York (1858). Of his commentaries, we have English translations of those on Genesis, the Epistle to the Galatians, and the first Epistle of St. Peter. But generally speaking the style of Luther, especially the German, is so thoroughly original, idiomatic, hearty, and characteristic, that it baffles the skill of the most experienced translators. Coleridge, in his "Table Talk," says: "Six volumes of translated selections from Luther's works, two being from his 'Letters,' would be a delightful work. The translator should be a man deeply imbued with his Bible, with the English writers from Henry VII. to Edward VI., the Scotch divines of the 16th century, and with the old racy German." In "The Friend" he calls this task not only difficult, but "scarcely possible for any man, however great his talents in other respects, whose favorite reading has not lain among the English writers from Edward VI. to Charles I."

LUTHERAN CHURCH. The Lutheran church has been known by various titles. Her own earliest preference was for the name "Evangelical" (1525), and many of her most devoted sons have insisted on giving her this name without any addition. At the diet of Spire (1529) her confessors received the name of Protestants, which continued to be the diplomatic style of the church till the peace of Westphalia (1648), and which to a large extent in European usage is still confined to the Lutherans. In Poland and Austria her official title is "Church of the Augsburg Confession." The name Lutheran was first used by Eck when he published the bull against Luther, and was applied to all who took part against the pope. Luther strongly disapproved of the name, and the church, while, to avoid the confusion which would arise if it was laid aside, she tolerates it, does so with a protest against the misapprehension the name might create, that she concedes to Luther any other position than that of a witness for the truth. As distinct on the one side from the Roman Catholic church, and on the other from the various Protestant bodies, she is known as the "Evangelical Lutheran Church." **I. DOCTRINE.** In the three general creeds and in the unaltered Augsburg Confession (1530) the Lutheran church has a bond of her distinctive life throughout the entire world. As a further development of her doctrines, the larger part of the church recognizes the confessional character of the "Apology for the Confession" (1530), the larger and smaller catechisms of Luther (1529), the Smalcald articles (1537), and the *Concordia Formula* (1577), all which were issued together in 1580, with a preface signed by 51 princes, and by the official representatives of 35 cities. The whole collection bore the title of the "Book of Concord." The funda-

mental doctrine of the Lutheran church is that we are justified before God, not through any merit of our own, but by his tender mercy, through faith in his Son. The depravity of man is total in its extent, and his will has no positive ability in the work of salvation, but has the negative ability of ceasing its resistance. Jesus Christ offered a proper vicarious and propitiatory sacrifice. Faith in Christ presupposes a true penitence. The renewed man co-works with the Spirit of God. Sanctification is progressive, and never reaches absolute perfection in this life. The Holy Spirit works through the Word and the sacraments, which alone, in the proper sense, are means of grace. Both the Word and the sacraments bring a positive grace which is offered to all who receive them outwardly, and which is actually imparted to all who have faith to embrace it. Luther, in consequence of his rigid training in the Augustinian theology, had maintained at an earlier period a particular election, a view which he gradually abandoned. The views of Arminius himself in regard to the five points were formed under Lutheran influences, and do not differ essentially from those of the Lutheran church; but on many points in the developed system now known as Arminianism, the Lutheran church has no affinity whatever with it, and on these points would sympathize far more with Calvinism. The "Form of Concord" touches the five points almost purely on their practical sides, and on them arrays itself against Calvinism rather by the negation of the inferences which result logically from that system than by express condemnation of its fundamental theory in its abstract form. In the United States the doctrinal test varies in strictness in different synods, from an *ex animo* subscription to the whole body of symbols, down to the mere declaration, after the somewhat vague formula recommended by the general synod, that the fundamental doctrines of the Word of God are taught in a manner substantially correct in the doctrinal articles of the Augsburg Confession. The Evangelical Lutheran church regards the Word of God, the canonical Scriptures, as the absolute and only law of faith and of life. Whatever is undefined by its letter or its spirit is the subject of Christian liberty, and pertains, not to the sphere of conscience, but to that of order; no power may enjoin upon the church as necessary what God has forbidden, or has passed by in silence, as none may forbid her to hold what God has enjoined upon her, or to practise what by his silence he has left to her freedom. Just as firmly as she holds upon the one hand that the Bible is the rule of faith, and not a confession of it, she holds on the other that the creed is a confession of faith and not the rule of it. The creeds are simply the testimony of the church to the truths she holds; but as it is the truth they confess, she of necessity regards those who reject the truth confessed in the creed, as rejecting the truth set forth in the Word. While, therefore, it is as true of the Lutheran church

as of any other that when she lays her hand upon the Bible she gives the command: "Believe!" and when she lays it on the confession, she puts the question: "Do you believe?" it is also true, that when a man replies "No" to the question, she considers him as thereby giving evidence that he has not obeyed the command. Very great misrepresentations have been made in regard to certain doctrines of the Evangelical Lutheran church, which it may be well to notice. No doctrine can be charged upon her as a church unless it is set forth in a confession to which she gives a universal recognition. The only creeds which have this attribute are the œcumenical creeds and the Augsburg Confession.

1. *Baptism.* The Lutheran church holds that it is necessary to salvation to be born again of water and of the Spirit (John iii. 5, and Augsburg Confession, arts. ii. and ix.); but she holds that this necessity is ordinary, not absolute, or without exception; that the contempt of the sacrament, not the want of it, condemns, and that though God binds us to the means, he does not bind his own mercy by them. From the time of Luther to the present hour the Lutheran theologians have maintained the salvability and actual salvation of infants dying unbaptized. The rest of the doctrine of the Lutheran church, as a whole, is involved in her confessing with the Nicene creed "one baptism for the remission of sins," and that through it the grace of God is offered; that children are to be baptized, and that being thus committed to God they are graciously received by him. At the same time she rejects the theory of the Anabaptists, that infants unbaptized have salvation because of their personal innocence, and maintains that the nature with which we are born requires a change, which must be wrought by the Spirit of God before we can enter heaven (A. C., arts. ix. and ii.), and that infants are saved by the application of Christ's redemptory work.

2. *Consubstantiation.* The charge that the Lutheran church holds this doctrine has been repeated times without number, although her theologians without a dissenting voice repudiate both the name and the thing, in whole and in every one of its parts. In the "Wittenberg Concord" (1536), prepared and signed by Luther and the other leaders in the church, it is said: "We deny the doctrine of transubstantiation, as we do also deny that the body and blood of Christ are locally included in the bread." The "Form of Concord" says: "We utterly reject and condemn the doctrine of a Capernaïtish eating of the body of Christ, which after so many protestations on our part is maliciously imputed to us; the manducation is not a thing of the senses or of reason, but supernatural, mysterious, and incomprehensible. The presence of Christ in the supper is not of a physical nature, nor earthly, nor Capernaïtish, and yet it is most true." It would not be difficult to produce ample testimony of the same kind from writers of other communions. Dr. Waterland, in his work on the doctrine of the eucharist, speaks thus:

"As to Lutherans and Calvinists, however widely they may appear to differ in words and names, yet their ideas seem all to centre in what I have mentioned. The Lutherans deny every article almost which they are commonly charged with by their adversaries. They disown assumption of the elements into the humanity of Christ, as likewise augmentation and impanation, yea, and consubstantiation and concomitancy; and if it be asked, at length, what they admit and abide by, it is a sacramental union, not a corporeal presence." D'Aubigné says: "The doctrines (on the Lord's supper) of Luther, Zwingli, and Calvin were considered in ancient times as different views of the same truth. If Luther had yielded (at Marburg), it might have been feared that the church would fall into the extreme of rationalism. . . . Taking Luther in his best moments, we behold merely an essential unity and a secondary diversity in the two parties." 8. *Ubiquity.* The Lutheran church holds that the essential attributes of the divine and of the human natures in Christ are inseparable from them, and that therefore the attributes of the one can never be the attributes of the other. But a large part of her greatest theologians hold also that as his human nature is taken into personal union with the divine, it is in consequence of that union rendered present through the divine, wherever the divine is; that is, that the human nature of Christ, which as to its finite presence is in heaven, is in another sense everywhere present. "Our church rejects and condemns the error that the human nature of Christ is locally expanded in all places of heaven and earth, or has become an infinite essence." ("Form of Concord," pp. 548, 695.) "If we speak of geometric locality and space, the humanity of Christ is not everywhere." "In its proper sense it can be said with truth, Christ is on earth or in his supper only according to his divine nature, to wit, in the sense that the humanity of Christ by its own nature cannot be except in one place, but has the majesty (of co-presence) only from the divinity." "When the word corporeal is used of the mode of presence, and is equivalent to local, we affirm that the body of Christ is in heaven and not on earth." "Of a local presence of the body of Christ in, with, or under the bread, there never was any controversy between the Lutherans and Calvinists; that local presence we expressly reject and condemn in all our writings. But a local absence does not prevent a sacramental presence, which is dependent on the communication of the divine majesty." (Colloq. Mompelgart, Tübingen, 1594.)

4. *The Lord's Day.* The Augsburg Confession touches on this subject only incidentally in connection with the question of church power. It teaches that the Jewish sabbath is abolished; that the necessity of observing the first day of the week rests not upon the supposition that such observance has in itself a justifying power, but on the religious wants of men. It teaches moreover that the Lord's day is of apostolic in-

stitution. The judgment of the great theologians of the church, almost without exception, has been that the sabbath was instituted at the creation of man; that the generic idea of devoting one day of the week to rest from labor and to religious duties pertains to the entire race through all time; and that the law of the sabbath, so far as it is not determinative and typical, is binding on Christians. ("The Lutheran Church and the Divine Obligation of the Lord's Day," by the Rev. O. P. Krauth, 1856.)—At times, especially in the early history of the Lutheran church, there arose controversies, the most important of which were: 1, the Philipistic, arising from the excessive desire of Melancthon and his school to harmonize with the Roman Catholics and the Reformed; 2, the antinomistic (1537-'40, 1556), caused by the effort of Agricola to introduce what has been called a "Pelagianism of the gospel;" 3, the Osiandrian (1550-'67), so called from Osiander, who confounded sanctification with justification; 4, the adiaphoristic (1548-'55), (see ADIAPHORA); 5, the Majoristic (1551-'52), on the necessity of good works; 6, the synergistic (1555-'67), on the co-operation of the human will in conversion, in the course of which Flacius spoke of original sin as substantial, not accidental; 7, the Crypto-Calvinistic (1552-'74). The view of Calvin in regard to the Lord's supper was so much profounder than that of Zwingli (which Calvin strongly condemned), and indeed in some aspects so Lutherizing, that Melancthon, without abandoning the Lutheran view, thought that Calvin's might be tolerated, and the points of difference ignored in the confessions. This position was assailed by the stricter Lutherans. In the course of controversy the more general questions connected with the person of Christ were discussed. All these questions were settled in the "Form of Concord" (1577). So deeply was the church grounded in fundamental unity of faith, that none of these controversies, violent as some of them were, were able to rend it into denominational fragments. The subsequent controversies have been on syncretism (1655), pietism (1686), and rationalism (1751), and those connected with the union and the revival of Lutheranism (from 1817, Harms's *Theses*, to the present hour).—Many learned writers of different denominations have found nothing in the doctrines or usages of Lutherans to prevent a union between them and other Protestants. Claude, one of the greatest theologians of the French Reformed church, says: "Those of the Augsburg Confession (who are called Lutherans) are in difference with us only about the point of the real presence, and about some questions of the schools which we cannot yet impute to their whole body; and as for the rest, they reject with us the invocation of saints, religious worship of images, human satisfactions, indulgences, purgatory, worship of relics, the public service in an unknown tongue, the merit of good works, transubstantiation, the sacrifice of the mass, the supremacy of the pope, the opinion of the in-

fallibility of the church, and the principle of blind obedience to the decisions of councils. They acknowledge the Scriptures to be the only rule of faith; they carefully practise the reading of them; they own their sufficiency; they believe their authority, independent of that of the church; they distinctly explain the doctrine of justification, and that of the use of the law, and its distinction from the gospel; they do not conceive amiss of the nature of faith, and that of good works; and as for popular superstitions, we can scarce see any reign among them." ("Defence of the Reformation," 1673, translated by T. B., London, 1815, vol. i. p. 291.) II. DIVINE WORSHIP. The Lutheran church regards preaching as an indispensable part of divine service. All worship is to be in the vernacular; the wants of the heart as well as of the reason are to be met. Whatever of the past is spiritual, beautiful, and appropriate, is to be retained. The church year, with its great festivals, is kept. With various national diversities there is a substantial agreement in the liturgical services of the Lutheran church throughout almost all the world. The hymns are sung by all the people with the organ accompaniment. The clergymen in their official functions wear a distinctive dress, usually a black robe, with the bands. A preparatory service precedes communion. The doctrine and practice of auricular confession were rejected at the beginning. The "private confession," which was established in some parts of the church, involves no enumeration or confession of particular sins whatever, unless the communicant desires to speak of them; and the "private absolution" is simply the announcement of the gospel promise with the gospel conditions to the individual penitent. But even in this form private confession has either never been practised, or has ceased in most parts of the church. The practice of exorcism in baptism, simply as a rite long established, and which might be tolerated if regarded merely as a symbolical representation of the doctrine that our nature is under the dominion of sin, was practised in parts of the church, but has fallen almost everywhere into oblivion. Persons are received to the communion of the church by confirmation performed by the pastor. "The Lutheran church," says the Rev. Dr. Schaff, "draws the fine arts into the service of religion, and has produced a body of hymns and chorals, which, in richness, power, and unction, surpasses the hymnology of all other churches in the world." In the United States wider extremes in the mode of worship in the Lutheran church sometimes exist in a single locality, than can be found within her whole communion in other parts of the world. This diversity is deeply lamented, and earnest efforts are making to introduce greater uniformity of usage. III. CONSTITUTION OF THE CHURCH. Many embarrassing circumstances prevented the Lutheran church from developing her life as perfectly in her church constitution as in her doctrines and worship. The idea of the universal priesthood of

all believers at once overthrew the doctrine of a distinction of essence between clergy and laity. The ministry is not an order, but it is a divinely appointed office, to which men must be rightly called. No imparity exists by divine right; a hierarchical organization is unchristian, but a gradation (bishops, superintendents, provosts) may be observed, as a thing of human right only. The government by consistories has been very general. In Denmark Evangelical bishops took the place of the Roman Catholic prelates who were deposed. In Sweden the bishops embraced the reformation, and thus secured in that country an "apostolic succession" in the high church sense; though, on the principles of the Lutheran church, alike where she has as where she has not such a succession, it is not regarded as essential even to the order of the church. The ultimate source of power is in the congregations, that is, in the pastor and other officers and the people of the single communions. The right to choose a pastor belongs to the people, who may exercise it by direct vote, or delegate it to their representatives. Synods possess such powers as the congregations delegate to them. "Ministers are related to congregations, not as their servants, but as the servants of the church;" and even in the United States, where the congregational principle has been more radically developed than anywhere else in the Lutheran church, "the synod to which pastors belong has the entire jurisdiction over them." ("Formula of the Lutheran Church," ch. iii. 3.) In the United States there are 86 synods, 26 of which are connected with the general synod. Absolute ministerial parity is maintained, and lay representation is universal; but many vital points of church organization are entirely unsettled, and the doctrine that synods are "merely advisory bodies" is often pressed in a way that tends to anarchy. The constitutional powers of the general synod are very few; and the feeling is increasing that a stronger and more centralizing government is needed by the church.

IV. THEOLOGICAL SCIENCE flourished in the 16th century most of all in the universities of Wittenberg, Tübingen, Strasbourg, Marburg, and Jena. To this era belong Luther, Melancthon, Flacius, Chemnitz, Brentius, and Chyträus. In the 17th century occur the names of Glassius, Pfeiffer, Erasmus Schmidt, Haksplan, Geier, Seb. Schmidt, Calovius; in dogmatics, Hutter, Gerhard, Quenstedt, Calixtus, Hunnius; in church history, Rechenberg, Ittig, Sagittarius, Seckendorf, and Arnold. In the 18th century, Lösscher closes the ancient school, and the pietistic school, practical rather than scientific, is illustrated by Lange. The conservative pietistic, avoiding the faults of the others and combining their virtues, embraces Hollazius, Starck, Buddeus, Cyprian, J. C. Wolf, Weismann, Deyling, Carpzov, J. H. and O. B. Michaelis, J. G. Walch, Pfaff, Mosheim, Bengel, and Crusius. The school which treated theology after the philosophical method of Wolf numbers S. J. Baumgarten, Reinbeck, and Carpzov; to the

transitional school belong Ernesti, J. D. Michaelis, Semler, who prepared the way for rationalism, and Zöllner; the principal members of the rationalistic school were Griesbach, Koppe, J. G. Rosenmüller, Eichhorn, Gabler, Berthold, Henke, Spittler, Eberhard, and A. H. Niemeyer. Of the supranaturalistic school, abandoning the ancient orthodoxy in various degrees, but still maintaining more or less of the fundamentals of Christianity, are Morus, Döderlein, Seiler, Storr, Knapp, Reinhard, Lilienthal, and Köppen; and in church history, Schröckh, O. W. F. Walch, Stäudlin, and Planck. The founder of the Lutheran theology of the 19th century was Schleiermacher (died 1834), the greatest of the defenders of the union between the Lutheran and Reformed churches of Germany. (See UNITED EVANGELICAL CHURCH.) Neander may be classed as pietistic supranaturalist, De Wette as historico-critical rationalist, Hase as philosophico-æsthetic rationalist. The chief defenders of the vulgar rationalism are Röhr, Paulus, Wegscheider, Bretschneider, and Ammon; of historico-critical rationalism, Winer, Fritzsche, Credner, Schulz, Von Cölln, Gesenius, Tuch, Knobel, Hupfeld, Hitzig, Ewald, Bertheau, and Lengerke. The rational supranaturalistic school is represented by Tzschirner, Tittmann, C. F. K. Rosenmüller, and Baumgarten-Crusius; supranaturalism proper, or suprarationalism, by E. G. Bengel, Flatt, Heubner, Augusti, Hahn, Böhmer; pietistic supranaturalism by Tholuck (who has approached more closely of late to a thoroughly Lutheran position), Hengstenberg, Olshausen, Stier, Hävernick, Steiger, and Bunsen in his early position, now a rationalist. The representatives of the "new" or "German" theology, of the school of Schleiermacher, of Lutheran origin, are Lücke, Nitzsch, Julius Müller, Ullmann, Twisten, Dörner, Liebner, and Martensen; also Rothe, I. T. Beck, Außerlen, Umbreit, Bleek, H. A. W. Meyer, Huther, Wieseler, and Tischendorf. The writers of the 19th century whose names we have given are or were within the "Union," and defenders of it, with a few exceptions. The representatives of the Lutheran theology, for the most part, in its strictest sense, are Claus Harms, who struck the first decisive blow at rationalism (1817), Scheibel, Sartorius, Rudelbach of Denmark (one of the most learned of the orthodox theologians of our time), Guericke, Harless, Höfling, Thomasius, Philippi, Harnack, Kahnis, Dieckhof, Löhe, Vilmar, Krabbe, Kliefoth, J. C. K. von Hoffmann (who departed from the received view of the atonement), Delitzsch (combining genius with great erudition), M. Baumgarten, Luthardt, Dreschler, Caspari, Oehler, Keil, and J. H. Kurtz. Two distinguished jurists, K. F. Göschel and F. J. Stahl, are to be included among the defenders of the Lutheran confession. In the United States the energies of the best men of the church have been directed mainly into the channels of practical activity; yet there has nevertheless been an honorable exhibition of theological ability and learning. Among the most prominent living Lutheran theological writers

are S. S. Schmucker, one of the principal authors and defenders of the "eclectic or American Lutheran system;" C. Philip Krauth, who was the first president of Pennsylvania college, and among the earliest laborers in exciting an interest in German theology, and is the senior editor of the "Evangelical (quarterly) Review," for which he has furnished very valuable translations, and various original articles characterized by genial and ripe thought presented in a singularly unpretending form; and O. F. Schaeffer. B. Kurtz, Walther, Prof. M. L. Stöver, J. W. Mann, W. M. Reynolds, Lape, Van Alstine, Harkey, Oswald, and Anspach have written valuable practical works; and Strobel and Weiser have furnished popular history and biography. J. G. Morris has an extensive reputation as a translator and elaborator of some of the best German religious fictions, and as a successful occasional writer. O. W. Schaeffer is the author of the best history of early Lutheranism. Krotel has translated the "Life of Melancthon." J. A. Seiss, H. I. Schmidt, T. Stork, W. Passavant, and Bachman also deserve mention. V. EDUCATION. The early efforts of Luther in behalf of education (see COMMON SCHOOLS, vol. v. p. 551, and EDUCATION, vol. vi. p. 769) were continued by his successors through the means of catechetical instruction, congregational and public schools, and universities. There are no exclusively Reformed universities in Germany proper. The universities which the Lutheran church has in part or in whole may be classified as follows: 1, those in which the three confessions are represented—Tübingen, Giessen, Breslau, and Bonn; 2, the two confessions, Lutheran and Reformed—Heidelberg, Greifswalde, Marburg, Königsberg, Halle, Erlangen (the professors Lutheran with one exception), and Berlin; 3, exclusively Lutheran—Leipsic, Rostock (Wittenberg, transferred to Halle in 1817, now a seminary for candidates for the ministry), Jena, Kiel, and Göttingen; in Denmark, Copenhagen; in Norway, Christiania; in Sweden, Lund and Upsal; in Russia, Dorpat. In the United States the Lutheran church has 11 colleges, 7 theological seminaries, 10 academies, and 11 female seminaries; the periodicals are 7 English, 12 German, 1 Swedish, and 1 Norwegian. VI. EARLY MISSIONS. In 1559 Gustavus Vasa of Sweden founded a mission among the Laplanders, which was continued with renewed earnestness by Gustavus Adolphus, Denmark also aiding. Thomas von Westen (died 1737) was the apostle of this mission. Heyling of Lübeck, without any aid, labored as a missionary in Abyssinia (1635), and others, of the circle of his friends, engaged in the same cause in various parts of the East. Frederic IV. of Denmark established the East India mission at Tranquebar (1706), for which Francke furnished him two devoted laborers, Plützschau and Ziegenbalg, the latter of whom translated the New Testament into Tamil (1715). The labors of this mission were also extended to the English possessions. From the orphan house at Halle

went forth a succession of missionaries, among whom Schwartz (died 1798) is preëminent. An institution for the conversion of the Jews was established at Halle in 1728. Egede (died 1758) of Norway commenced his labors in Greenland in 1721. In 1736 he returned, and established in Copenhagen a mission seminary. The idea of union in the practical work of religion among Christians of different creeds, originated with Urlsperger of Augsburg (1780).—The number of members of the Lutheran church throughout the world is estimated at more than 80,000,000, of whom 2,000,000 are found in Russia, 1,250,000 in Austria, 700,000 in France, and about 800,000 in America. They are most numerous, in proportion to the population, in the Scandinavian kingdoms and the states of Germany.

LÜTZEN, a town of Prussian Saxony, 9 m. S. E. from Merseburg; pop. 2,280. It is noted in history as the scene of the battle (Nov. 16, 1632) between Gustavus Adolphus and Wallenstein, in which the Swedish king lost his life, his army being victorious; and of another (May 2, 1813) between Napoleon and the allied Russians and Prussians, in which the allies after a temporary success were defeated with the loss of 15,000 men, but without sacrifice of guns or standards, while the French had about 17,000 killed and wounded and 900 taken prisoners.

LÜTZOW, LUDWIG ADOLF WILHELM, baron, a Prussian general, born May 18, 1782, died in Berlin, Dec. 6, 1834. He was celebrated as the leader of a corps of soldiers, chiefly composed of young noblemen, organized in 1813 against the French. It was called after him *Lützow'sches Freicorps*, and was more generally known under the name of the black huntsmen (*Schwarze Jäger*). Körner was a member of this corps, and one of his finest lyrics (*Lützow's wilde Jagd*) relates to it.

LÜTZOW, THERÈSE VON, a German authoress, born in Stuttgart, July 4, 1804, died in Java, Sept. 16, 1852. In the early part of her life she resided at Hamburg, where her father officiated as Russian *chargé d'affaires*. In 1825 she was married to the Russian consul-general Von Bacharach, after which she resided at Hamburg and St. Petersburg, and travelled extensively in Italy and the East. Having been separated from her first husband in 1849, she became the wife of the Dutch Col. von Lützow, whom she accompanied to the East Indies, where she died. She published, under the name of Therese, a number of works of travels and novels.

LUXEMBOURG, FRANÇOIS HENRI DE MONTMORENCY BOUTEVILLE, duc de Luxembourg-Pinei, a marshal of France, born in Paris, Jan. 8, 1628, died Jan. 4, 1695. He was the posthumous son of François de Montmorency, count de Bouteville, who was beheaded in the reign of Louis XIII. for fighting a duel. At an early age he was introduced at court by his cousin, the princess de Condé, and thenceforth attached himself to the fortunes of her illustrious son the great Condé, to whom in his per-

sonal qualities he bore considerable resemblance. Under Condé he first saw service at the siege of Lerida, and for his gallantry at the battle of Sens, although then but 20 years of age, he received from Anne of Austria the appointment of *maréchal-de-camp*. Throughout the war of the Fronde he adhered to his commander, with whom he joined the Spaniards and fought against his countrymen, until the peace of the Pyrénées restored tranquillity to France. About this time he was married to Madeleine, heiress and representative of the dukes of Luxembourg-Pinei, a title which he thereupon assumed. At the breaking out of war with Spain in 1667 he joined the army of Turenne as a volunteer, and in the succeeding year, in the capacity of lieutenant-general, aided Condé in the conquest of Franche-Comté. In the campaign of 1672 he held chief command in Holland, and at Grool, Deventer, Zwoll, and other places, showed himself a skilful general. The statement of the Dutch historians, that before taking the field he encouraged his troops to commit the grossest excesses, is deemed unworthy of credit, and is inconsistent with his character. For the destruction of public buildings and private property he is not responsible, having acted under positive orders from Louvois, the war minister of Louis XIV. He ended this campaign by a brilliant retreat with 16,000 men in the face of an army of 70,000. He fought under Condé at the battle of Senef in 1674, and in 1675, after the death of Turenne, was appointed a marshal of France. His first operations in this capacity were unfortunate, and to his failure to relieve Philippsburg was attributed the remark of his friend Condé, that "Luxembourg pronounced a better eulogium on Turenne than Mascaron or Fléchier." He however soon after captured Valenciennes and Cambray, aided in gaining the battle of Cassel, forced the prince of Orange to raise the siege of Charleroi, and, when surprised by the latter at St. Denis near Mons, while negotiations for peace were in progress, conducted his retreat with so much skill that he closed the campaign with an enhanced military reputation. The long peace which succeeded the treaty of Nimeguen gave an opportunity to his enemies at court, of whom Louvois was the most determined and unscrupulous, to bring him into disrepute. He was accused of participating in the infamous plots of Brinvilliers and Voisin, and of attempting to poison his own wife and other persons. To prove his innocence he voluntarily surrendered himself a prisoner at the Bastille, where he was confined for 14 months. Released in 1680 with an unspotted character, he was nevertheless forbidden to reside within 20 leagues of Paris. After 10 years of neglect and disgrace he was appointed by Louis to command the army destined for the invasion of Flanders, and in the campaign of 1690 defeated the prince of Waldeck at Fleurus. He was equally successful at Lentze and Steinkerk in 1692, and in 1693 defeated William III. of England in the battle of Neerwinden, at which so

many men were slaughtered on both sides that it was said in France the *De Profundis* should have been sung for the victory instead of the *Te Deum*. His last great military act was his retreat before a superior force through Flanders to Tournay. In Dec. 1694, he was attacked with a dangerous malady, and died after an illness of a few days, when in the zenith of his fame, and universally acknowledged to be the first general of his time in France. He was a man of simple manners, of a frank and generous disposition, and possessed the affection of his troops, with whom his relations were on an almost paternal footing.

LUXEMBURG (Fr. *Luxembourg*), a territory belonging partly to Belgium and partly to Holland, bounded N. by Liège, E. by Rhenish Prussia, S. by the French department of Moselle, S. W. by that of Ardennes, and W. by Namur; area, 2,550 sq. m.; pop. about 390,000. It is traversed by branches of the Ardennes highlands, and watered by the Meuse and Moselle and their affluents. It was originally called Lützelburg, and was governed for some generations by German princes, whose progenitor was Count Siegfried of the Ardennes. It subsequently became a possession of the counts of Limburg, one of whom assumed the name of count of Luxembourg. To this house belonged the emperors Henry VII., Charles IV., son of King John of Bohemia, Wenceslas, and Sigismund, in the 14th and 15th centuries, all of whom but the first also reigned in Bohemia. Charles IV. elevated Luxembourg to the rank of a duchy. Wenceslas gave it to his niece Elizabeth, who ceded it to Philip the Good of Burgundy. With Mary, the daughter of Charles the Bold, it came into the hands of Maximilian of Austria. Philip II. of Spain received it from his father, the emperor Charles V. By the peace of Utrecht in 1713 it was restored to Austria, and in 1795 it was conquered by France. In 1815, at the congress of Vienna, it was made a member of the German confederation, as a grand duchy, and the king of the Netherlands was selected as its ruler, under the title of grand duke of Luxembourg. In 1830 Luxembourg was divided between Belgium and Holland, but the latter retained little beyond the fortress of Luxembourg, until April 18, 1839, when a new treaty was signed in London, by which the territory was divided, and Belgium resigned a portion of Limburg, to be united with the part of the king of Holland, as a member of the German confederation. The territory abounds so much with woods and forests, that under the French administration it was appropriately called *département des Forêts*. Agriculture flourishes to some extent in the lower part of the country, and wine of an inferior quality is produced along the banks of the rivers.—The present Belgian province of Luxembourg comprises the arrondissements of Arlon, Bastogne, Marche, Neufchâteau, and Virton, including the old duchy of Bouillon; area, 1,700 sq. m.; pop. in 1857, 193,753. The great Lux-

emburg railway is now opened to Chimay, Rochefort, and Grufont (St. Hubert), and is rapidly advancing along the whole line to Arlon. The industry of Belgian Luxembourg comprises iron works, slate quarries, potteries, tanneries, cloth and paper mills. Capital, Arlon.—The present Dutch province, or grand duchy of Luxemburg, lies E. of the Belgian territory, and has an area of 850 sq. m.; pop. in 1859, 195,028. The king of Holland is by virtue of this possession a member of the German confederacy, has a vote in the diet, and furnishes for Luxemburg and Limburg a contingent of about 3,000 men to the federal army. The state of public affairs in the duchy for some time gave rise to serious complications, the German diet having authorized the king in 1839 to rule it according to the political principles which prevail in other parts of Holland, while the Luxemburgers demanded a more liberal form of government. Hassenpflug, the minister in Luxemburg, was at length compelled to resign in 1840. After the accession of King William II. some privileges were granted to the grand duchy (Oct. 12, 1841), and in 1842 it joined the German Zollverein. Until 1848, however, the country was agitated by political and religious strife, in which the Roman Catholic bishop Laurent took a conspicuous part. The revolution of 1848 put an end to this agitation, and introduced parliamentary government, which, however, has since been modified. The conflict between the liberal and the government party ended in 1858 in favor of the latter, and the royal civil list was raised in the same year from 100,000 to 200,000 francs. The inhabitants are chiefly Roman Catholics; the majority of them are Walloons, the rest mostly Germans. The principal exports are hemp, flax, game, timber, iron, leather, cheese, and some cloth.

LUXEMBURG, capital of the Dutch province or grand duchy of Luxemburg, situated in lat. 49° 37' N., long. 6° 9' E., on the Elze or Alzette, 76 m. N. N. E. from Liège; pop. about 12,000, beside the garrison. Its situation has been frequently compared with that of Jerusalem; it is completely surrounded by high escarped rocks. The upper town occupies a plateau, joined to the neighboring country only on the W. On the other 3 sides are precipices nearly 200 feet deep. Similar rocks rise opposite to these, enclosing a valley, in whose depths the lower town nestles. The communication between the upper and lower towns is by flights of steps, or by streets carried up in zigzags, so as to make them passable for carriages. The fortifications of Luxemburg give the town a remarkably picturesque appearance. They have been successively increased and improved by the Spaniards, Austrians, French, and Dutch, and entirely repaired and much strengthened since 1830 by the German diet. The most remarkable part of the fortifications is that called *Le Bouc*, a projecting headland of rock, hollowed out from top to bottom, and commanding with its loopholes and embrasures the valley up and down; its casemates are said

to resemble those of Gibraltar. Carnot declared Luxemburg to be "the strongest fortress in Europe, next to Gibraltar—the only point for an attack upon France from the direction of the Moselle." It is one of the principal fortresses of the German confederacy, and garrisoned by 6,000 Prussian troops. Luxemburg has a fine cathedral and other churches, and various public institutions. The industry is carried on in the lower town, where are many mills, dye works, and manufacturing establishments. An international bank with a capital of 40,000,000 francs was established there in 1856, and a railway to join the Belgian line at Arlon is contemplated. Diligences connect Luxemburg with Treves (Rhenish Prussia) and with Metz (France), and the journey to the latter city leads over some of the most favorite hunting and the wildest regions of the Ardennes.

LUXOR. See THEBES.

LUYNES, HONORÉ THÉODORIC PAUL JOSEPH D'ALBERT, duke of, a French archæologist, born in Paris, Dec. 15, 1802. He is descended from the elder branch of the ancient family of Albert, which assumed alternately the names of Luynes and Chevreuse, from an intermarriage in 1621 of Claude de Lorraine, one of the early lords of the town of Chevreuse, with the widow of Charles d'Albert, duke of Luynes, the latter a constable of France, who was mainly instrumental in the overthrow of the adventurer Concini (see ANORE, MARSHAL D'), and superseded him in the favor of Louis XIII. Among the other noteworthy members of this family were the son of the preceding, eminent as a man of letters, and one of his descendants, Paul d'Albert de Luynes (born in 1703, died in 1788), who was a cardinal and archbishop of Sens, member of the French academy and of the academy of sciences, and a prelate highly esteemed in the Roman Catholic church. The father of the present duke was one of the richest landed proprietors of France. His mother was Mme. de Chevreuse (1785–1813), whom Napoleon I. banished from the court on account of her bold comments on the imperial régime. At the interposition of Talleyrand she was afterward permitted to return, and was even appointed lady in waiting to Josephine; but she did not conceal her dislike of the emperor, and refusing his order to escort the captive queen of Spain to France, upon the ground that she would not perform the function of a gaoler, she was again expelled from Paris, as were Mme. Récamier and Mme. de Staël. After the banishment of his mother, young Chevreuse, or De Luynes, as he afterward signed his name, was educated by his grandmother Mme. de Luynes, and spent 7 years in the military service. His attention was turned to archæological studies by the discovery of the remains of the Greek city Metapontum on an estate of his in Italy. After the revolution of July, 1830, he equipped at his own expense the national guard of Dampierre, and evinced his readiness to make further pecuniary sacrifices for the support of the govern-

ment, but refused to take his seat in the legislature. In 1848 he was a member of the constituent assembly, and in 1849 of the legislative assembly. He was opposed to the republican party, and also hostile to Louis Napoleon. He was imprisoned for a short time after the *coup d'état* of Dec. 2, 1851. He has collected at his manor of Dampierre a remarkable gallery of works of art, is a generous patron of art and artists, was admitted in 1880 to the institute as a free member of the academy of inscriptions and belles-lettres, and was appointed in 1854 to superintend the long projected catalogue of the imperial library. Among his principal works are: *Études numismatiques* (1835); *Métaponte* (in concert with Debasq, 1836); and *Choix de médailles Grecques* (1840).

LUZAC, JEAN, a Dutch philologist and publicist, born in Leyden in 1746, killed by an explosion of gunpowder in the port of Leyden in 1807. He was of a French Protestant family, was educated for the bar at the Hague, and in 1772 became one of the editors of the "Leyden Gazette," a journal of European reputation, controlled since 1788 by his father and uncle. For a number of years subsequent to 1775 he was its sole editor, in which capacity he became known as a friend or correspondent of Washington, Adams, Jefferson, and many eminent Europeans. He subsequently became Greek professor at the university of Leyden, and in 1795 published an address *De Socrate Cive*, dedicated to John Adams, whose son, John Quincy Adams, had studied under his direction. During the revolutionary troubles in Holland he was forbidden to lecture on Greek history to his classes; and having refused to obey this injunction, he was deprived of his professorship, which was however restored to him in 1802 with an increase of salary. Upon being suspended from his professional functions he received a letter from Washington, expressing sympathy in his behalf, and encouraging him to hope for justice. His *Lectioes Attica*, a defence of Socrates, was published in 1809.

LUZERNE, a N. E. co. of Penn., intersected by the north branch of the Susquehanna river, and also drained by the Lackawanna, Nescopeck, Huntingdon, and Wapwallopen creeks; area, 1,427 sq. m.; pop. in 1850, 56,072. Its surface is mountainous, but diversified by many beautiful and fertile valleys, among which is that of Wyoming. Several ridges of the Alleghanies and the Wyoming and Moosic mountains traverse the county. It contains very rich and extensive coal fields. The productions in 1850 were 165,328 bushels of wheat, 290,122 of Indian corn, 287,797 of oats, and 49,872 lbs. of wool. There were 23 grist mills, 85 saw mills, 11 iron foundries, 2 woollen factories, 14 tanneries, 39 churches, and 6,815 pupils attending public schools. A branch of the state canal passes through the county, also the Delaware, Lackawanna, and western, the Pennsylvania coal company's, and the Lehigh and Susquehanna railroads. Capital, Wilkesbarre.

LUZERNE. See LUERNE.

LUZON. See PHILIPPINE ISLANDS.

LUZULA, a pretty grass-like plant of the natural order *juncacea*, growing in fields and on bare spots by the roads, as seen in the field *luzula* (*L. campestris*, De Candolle), introduced through cultivation from Europe. Its leaves are lance-linear, ciliate with long hairs; its flowers are borne in spikelets of 4 to 12 ovoid, straw-colored florets, some of them furnished with long peduncles, others with short ones forming a sort of umbel. There are species which are peculiar to the high mountains of New England and northward, of which the *L. arcuata* (Meyer) is an interesting plant, found upon the alpine summits of the White mountains in New Hampshire; it has channelled linear leaves, ovoid chestnut-brown spikes, ciliate fringed bracts, and taper-pointed sepals. The *luzula* are of no especial value, though the roots of *L. campestris* have a popular reputation as a diuretic, and are used as such in the north of Europe and in China.

LYCAON, a king of Arcadia, generally represented as a son of Pelasgus by Melibœa, daughter of Oceanus, and described by some as the first civilizer of Arcadia, by others as a barbarian who defied the gods. He became by several wives the father of a great number of sons, who were so notorious for arrogance and impiety that Jupiter resolved to punish them. Appearing to them at their dwelling in Arcadia disguised as a poor man, they invited him to a repast, at which was served up the flesh of a boy whom they had murdered. The god rejected the horrible food, and transformed Lycaon and all his sons save one into wolves, or according to other accounts destroyed them by a flash of lightning. The flood of Deucalion was said by some to have been a consequence of the crimes of the Lycaonids.

LYCAONIA, in ancient geography, a division of Asia Minor, bounded N. by Galatia, E. by Cappadocia, S. by Cilicia, S. W. by Isauria (which at certain periods was regarded as a part of it), and W. by Phrygia, and now included in the Turkish province of Caramania. It was a narrow strip of table-land, deficient in water, with frequently varying boundaries. The inhabitants, according to the Acts of the Apostles, spoke a peculiar dialect. They were warlike and skilled in archery. The principal town was Iconium, now Konieh. Lycaonia is first mentioned in Xenophon's history of the expedition of the younger Cyrus, at the time of which it belonged to the Persian empire. After its conquest by Alexander and his death, it was attached to the kingdom of Syria, and subsequently came into the possession of the Eumenes, king of Pergamus, while the other part was ruled by native chieftains. In the latter half of the 1st century B. C. it was conquered by Amyntas, king of Galatia, with which country it passed on his death to the Romans under Augustus, being annexed to the province of Cappadocia.

LYCEUM, the principal gymnasium at Athens

dedicated to Apollo Lyceus, whence its name. It was situated in the eastern suburb of the city, and was surrounded with lofty plane trees. It was elaborately adorned by Pisistratus, Pericles, and Lyourgus the orator. Here Aristotle and his disciples taught, and were called peripatetics from their habit of walking up and down its porches while delivering their lectures.

LYCHNIS (Gr. λυχνίς, from λυχνος, a lamp), a genus of plants belonging to the natural order *caryophyllaceæ*, and so called because the thick cottony leaves of some species were used for wicks in lamps. The flowers of the lychnis are elegant, and some are even brilliant. The scarlet lychnis (*L. chalcadonica*) is a native of Siberia and Japan, but has long been cultivated in gardens, in its single and double varieties; its color varies from its natural rich scarlet to rose color and even to white. The ragged robin (*L. flos cuculi*) is a familiar plant, blossoming in early summer, and is best known for its double flowers. The *L. fulgens* is a very ornamental species, with a dwarfish upright stem, longer, broader, more viscidly pubescent leaves, and larger scarlet flowers; it is easily grown from seeds, blossoming the second year, and frequently sowing itself spontaneously. The Chinese lychnis (*L. coronata*) is also prized, but it is rather tender, and needs some protection in winter and planting out the stools in the spring. Several species of lychnis are natives of Great Britain, which are likewise pretty flowering plants. *L. apetala* (Linn.) and *L. alpina* (Linn.) are considered as North American, the one occurring in arctic America, the other in Labrador. The lychnises are readily raised, not only from their seeds, but from cuttings under hand glasses or by dividing their roots. They prefer a rich loamy soil for successful treatment.

LYCIA, an ancient country of Asia Minor, jutting out from the western part of its southern coast in a semicircular form, and bounded N. W. by Caria, from which it was separated by the river Glaucus, flowing into the gulf of the same name (now gulf of Makri), N. by Phrygia and Pisidia, the natural boundary being the Taurus range, and N. E. by Mount Climax, on the confines of Pamphylia. This is the northernmost mountain of the Solyma range, which borders the E. coast of the country and terminates in the Sacred Promontory (now Cape Khelidonia). West of the Solyma, and separated from it by the valley of the Linyrus and Arycandus, is the Massicytus range, and W. of the latter, between the Xanthus and Glaucus rivers, the Cragus. The N. part of the country is a table-land, from which most of the rivers flow in a southerly direction to the sea. The summits of the mountains on the E. coast rise above the line of snow; those of the W. coast are next in height. The valleys and the southern mountain terraces were renowned for fertility, while the slopes were covered with beautiful trees, which, together with its natural strength and the number of its good harbors, made Lycia one of the most flourishing coun-

tries of Lesser Asia. Among the productions were wheat, wine, oil, cedars, firs, and plane trees, saffron, and official chalk. The principal cities were Xanthus, Patara, Pinara, Olympus, Myra, Tlos, Telmessus, Arycanda, Limyra, and Phaselis. The inhabitants enjoyed a high reputation for having abstained from piracy, which so often prevailed in the neighboring Pamphylia and Cilicia. According to Herodotus, the most ancient name of the country was Milyas, and that of the original inhabitants Milyæ, who were afterward called Solymi. The Solymi, whose name is compared by critics with the Salem and Jerusalem of Canaan, are believed to have been a people of Semitic race; they were superseded in the lower parts of the country by Indo-European settlers, of whom Herodotus mentions the Termilæ from Crete, and Lycus, the son of Pandion, from Athens, who, fleeing before his brother Ægeus, was well received by Sarpedon, king of the Termilæ, and gave the country his name. Homer calls the country Lycia, and speaks of the Solymi as warlike mountaineers against whom Bellerophon was sent to fight by the king of Lycia. The Herodotean names of the original inhabitants were in historical times preserved only in those of the district of Milyas, which, beside the table-land of Lycia, embraced a part of Pisidia, and of the Solyma mountains. The bilingual inscriptions on the curious Lycian monuments, brought from the valley of the Xanthus by the English traveller Sir Charles Fellows, and now deposited in the British museum, prove that the native language of Lycia, though decidedly of Indo-European character, was far from resembling the Greek. The Lycians resisted with success the conquering power of Lydia under Croesus, but succumbed after a desperate struggle to the armies of Cyrus. They supplied Xerxes on his invasion of Greece with no fewer than 50 ships. After the conquest of Persia by Alexander, Lycia belonged for more than a century to the Syrian monarchy, from which it was detached by the Romans after their victory over Antiochus the Great, and given to their allies the Rhodians. It was soon, however, made independent, when it formed a flourishing republican confederation of cities, the constitution of which is highly spoken of by Strabo. This was overthrown by internal dissensions, when Lycia was united with Pamphylia by the emperor Claudius. Toward the close of the 4th century, however, it became a separate Roman province, with Myra as its capital.

LYCOMING, a N. co. of Penn., drained by the W. branch of the Susquehanna river and its tributaries; area, 1,080 sq. m.; pop. in 1850, 26,257. The surface is mountainous, a range of the Alleghanies extending through the middle from W. to E. with spurs stretching to the N. The valleys are very fertile, and it has extensive mines of bituminous coal. The productions in 1850 were 285,925 bushels of wheat, 262,456 of Indian corn, 166,308 of oats, and 85,220 lbs. of wool. There were 25 grist mills,

114 saw mills, 2 iron founderies, 8 woollen factories, 21 tanneries, 44 churches, and 5,809 pupils attending public schools. The Sunbury and Erie railroad passes through the county, by way of Williamsport, the capital.

LYCON, a Greek peripatetic philosopher, who for over 40 years presided at the lyceum in Athens as a successor of Aristotle, born in Laodicea, Phrygia, about 300 B. C., died in Athens about 228. He was a disciple of Strato, on whose death in 270 he became the head of the peripatetic school in Athens. He regarded corporal punishment as injurious to youth, whom he sought to stimulate by feelings of honor and shame. His elocution was so remarkable for its harmony that Diogenes Laërtius says his name was often written Glycon, "the sweet," but this is supposed to have been its original form. Cicero and Clement of Alexandria mention a work by Lycon on the limits of good and evil; and Apuleius quotes a treatise of his on the nature of animals.

LYCOPERDON, a name given by Micheli to a sort of fungus of the natural family of *gasteromycetes*, and represented in this country in a few species, which also occur in Europe, and in some that are as yet undescribed. It consists of a rounded substance made up of an external membranaceous covering (*peridium*), which becomes roughened by the breaking up of its exterior surface into irregular fragments or distinct wart-like projections, and within of a great quantity of dusky cobweb threads (*capillitium*), upon the surfaces of which innumerable minute, dust-like, brown particles (*sporidia*) are developed, which when the plant has become full grown and matured are driven out by an external pressure into the atmosphere in the form of fine dust. But when the lycoperdon first issues from the ground, it is of a soft, friable, caseous consistence; and if a thin slice be prepared for the microscope, the cellular structure of the entire tissue can be discerned. This soon ripens into a parchment-like covering, and into the dry filamentous interior, and the powdery, dust-like seeds. A not uncommon species is shaped like a pear (*L. pyriforme*), of a light chestnut-colored peridium; another is known as *L. gemmatum*, the peridium of which is invested with spine-like warts, and its dust-like seeds are of a yellowish green tint. The most extraordinary, perhaps, is the giant lycoperdon (*L. bovisata*, Fries, or *L. giganteum*, Batsch), which is often many feet in circumference. Schweinitz found it in Pennsylvania, though rare. It occurs likewise in Massachusetts, and no doubt may be found elsewhere in this country. Frequently the interior is converted into a putrescent mass, probably when injured by the wet. The spongy capillitium when dry will burn with a thick, smothering smoke, and has been used with success in stupefying bees. The use of it for this purpose has been claimed as a discovery in bee treatment in the United States within a few years; but Gerarde, an herbalist in 1597, mentions the same use of it by the country people

in his time. The smaller species answer the same purpose, but the greater size of this, as it ordinarily grows, is more advantageous. The capillitium being emptied of its dusty sporidia and itself washed away by the rains, the stalk or base of the lycoperdon still remains in the soil, in the form of a jagged-edged spongy cup, and is suggestive of the *L. cyathiforme* of Boeck, which he found in the drier soils of Carolina.

LYCOPHRON, a Greek poet and grammarian of the 3d century B. C., born in Eubœan Chalcia, died in Alexandria. He stood high in the favor of Ptolemy Philadelphus, and was one of the 7 contemporary poets, termed from their number *Pleiades*, who graced the court of that monarch. Philadelphus intrusted him with the classification of the works of the comic poets contained in the Alexandrian library. Lycophon likewise composed a work on the history of Greek comedy and comic poets. Suidas has preserved the titles of 20 of his tragedies, while Tzetzes makes their number over 60, of all which, however, only 4 lines remain. One of his poems is still extant, "Cassandra," or "Alexandra," a long iambic monologue, whose obscurity has become proverbial. The earliest edition of "Cassandra" is that of Venice (1518). The best editions are those of Potter (Oxford, 1697), and Bachmann (Leipsic, 1828). It has been translated into English by Lord Royston.

LYCOPODIACEÆ (Gr. *λυκος*, wolf, and *πους*, foot), or CLUB MOSSES, an order of cryptogamic plants of a low habit, usually looking like mosses; their cere stems often woody, their foliage consisting of sessile, awl-shaped or lanceolate, persistent and simple leaves, in the axils of which are little valved seed vessels (*sporangia*). The order contains only the two genera *lycopodium* and *selaginella*. The several species are called wolf's foot from some fancied resemblance they bear to the paw of that animal; they also have a variety of other names. The most familiar species is the running evergreen (*lycopodium complanatum*, Linn.), with long, tough, subterranean stems, clothed with a few scattered scales, and here and there having a few coarse fibrous roots. The upright branches spread out at top into regular subdivided forks, which are flattened and two-edged; the leaves are very short and acute. The spikes of fructification are conspicuous, usually in fours, and supported on elevated peduncles. Between the scales or bracts, which imbricate over each other to form a cylindrical figure, may be found the small seed vessels, full of a golden yellow powder. This species is much sought for decoration in wreaths, &c. The club moss (*L. clavatum*, Linn.) is much handsomer, with very long trailing and rooting stems, linear, lanceolate, spreading leaves, ending in a bristle, and is often found in shaded woods that are rather dry. The bog club moss (*L. inundatum*, Linn.) is a low creeping species closely appressed to the ground in muddy soils, bearing a single spike, which is the only upright part of the plant. There are some distinct varieties, of which Big-

low's club moss (*L. i. Bigelovii*) of Mr. Tuckerman may be mentioned. The species ranges as far southward as Louisiana, according to specimens collected by Drummond. The fox-tail club moss (*L. alopecurioides*, Linn.) is a stout-stemmed, densely leaved species, found in the pine barren swamps from New Jersey to Virginia and southward. The ground pine (*L. dendroideum*, Linn.) is perhaps the most beautiful, having upright stems from 6 to 9 inches high, the leaves in 4 or 6 rows, lanceolate linear, acute, entire, appressed, erect, the branches crowded but spreading fan-like; in contour like a little green tree. There are from 4 to 10 cylindrical spikes on each plant. This species is much prized in the composition of bouquets in the winter, furnishing good backs. It can be best found in the richer soils of shaded woods or under bushes. The shining club moss (*L. lucidulum*, Linn.) grows more sparingly in moister and in occasionally overflowed places in dark woods, or by the margins of rivulets; its stems are thick, 3 or 4 times forked, and its branches grow upward; its foliage is composed of rich, deep green, shining leaves, standing in about 8 rows or ranks upon the stems; it has no distinct spikes of fructification, the sporangia being in the axils of the ordinary leaves. This species is to be found principally at the north, but it also occurs along the higher Alleghanies at the south. On the summits of high mountains to the northward occurs the *L. selago* (Linn.), similar to the last in its general aspect, but thicker stemmed, closer, fuller branched, and forming a level-topped cluster; the plant is only from 8 to 6 inches high. This form is identical with the European species under the same name.—The moss-like lycopodiums are known as *selaginella*, the diminutive of *selago*, an ancient name of a species, and are pretty little plants. The most common is the rock moss lycopodium (*S. rupestris*), seen upon dry sunny rocks, of a bright green color when young and growing, but turning to a brownish hue when old and dry; the seed vessels, abundant toward the tips of the branches, are of a yellow color, looking like little two-valved pouches. Still another form in this section is seen in *S. apus* (Linn.), a very delicate flat-stemmed and complanate-leaved species, with pellucid foliage, and the plant looking like a scale moss; it is found in wet fields and near springs.—The lycopodiums have a similar geographical range to that of the ferns, mostly abounding in the tropics, and delighting in humid situations. Species occur however far northward, and in Lapland the *L. alpinum* and the *L. selaginoides* cover large tracts. Their uses are not very extensive. The yellow powder contained in the spore cases is inflammable, and is employed under the name of lycopode or vegetable brimstone in the manufacture of fireworks, and in pharmacy to roll up pills, which when coated with it may be put into water without being moistened. *L. clavatum* is almost the only variety now used in medicine. The earlier German herbalists used it against gravel.

Prof. Rolink of Jena recommended it against epilepsy in 1670, and Dr. Muralt of Zürich was the first to use it externally in intertrigo and other eruptive diseases in 1780. It always had a domestic reputation against the cardialgia and colic of young children. Dierbach recommends it as a soothing and somewhat anodyne remedy in affections of children, especially in colic, and also in whooping cough and asthma. Hahnemann revived the use of this gentle but efficacious remedy. He and his followers regard it as almost a specific against indigestion and even obstinate constipation, when attended with heat in the face and tendency to redness and eruptions, especially about the eyelids and nose. Given methodically it will often break up a tendency to styes upon the lids, and is useful in many chronic eruptions, both as an external application and internal remedy. In obstinate coughs it often proves efficacious. Its utility in many affections of the kidneys and bladder is also well established. The most remarkable plant of this order is the *yatum condensado* (great devil or accursed), which appears to be the *L. rubrum* of Chamisso. Sir William J. Hooker, who calls it *L. catharticum*, states that it acts vehemently as a purgative, and has been administered successfully in Spanish America in elephantiasis. Vastring says that woollen cloths, boiled with lycopodiums, especially with *L. clavatum*, acquire the property of becoming blue when passed through a bath of Brazil wood. *Selaginella denticulata* is cultivated as an ornamental plant, and several others with branching forked stems and delicate green leaves, from tropical South America, are prized for their beauty.

LYCOURGUS, the Spartan legislator, concerning whose personal history there is little certainty. According to Herodotus, he lived about 996 B. C., became guardian to his nephew King Labotas of the Eurystheneid line of Spartan kings, and in this capacity transformed the institutions of his country into the order which they retained for centuries. Whether his system of things was revealed to him by the Pythian priestess, whose oracle he visited, or was introduced from Crete, was in the time of Herodotus a matter of dispute, the Spartans themselves taking the latter view. Under his institutions the Spartans became from the most lawless of the Greeks tranquil and prosperous, and they regarded him reverentially, and built a temple to him after his death. This is the oldest statement concerning him. Thucydides, without mentioning Lycorgus, agrees in stating that the political system of the Spartans had been adopted by them 4 centuries before, and had successfully rescued them from intolerable disorders. This would make the introduction of the Lycurgan discipline to have occurred in 880–820 B. C., which Grote accepts as the most probable date. That no certainty was attainable in the 8d century B. C. respecting the date or parentage of Lycorgus appears from the fact that Timæus supposes two persons to have existed bearing the name, and that the acts of both had been as-

cribed to one. The more detailed account of Plutarch is deduced from authorities no more ancient than Xenophon and Aristotle, excepting the poets Alcman, Tyrtaeus, and Simonides. He is stated to have been of the Proclid line of kings, 11th in descent from Hercules, son of Eunomus, younger brother of Polydeutes, and uncle and guardian to Charilaus. After the death of Polydeutes, leaving a pregnant widow, the latter proposed to Lycurgus that he should marry her and become king. He refused the proffer, though temporarily exercising authority, awaited the birth of Charilaus, and immediately presented the child in the agora as the future king of the Spartans. Accused by the widow of ambitious designs, he left Sparta, and went to Crete, where he studied the laws of Minos and the institutions and customs of the different cities; thence he visited Ionia and Egypt, and, as some authors affirmed, Libya, Iberia, and even India. In Ionia he is said to have obtained from the descendants of Creophylus a copy of the Homeric poems, which had not previously been known in the Peloponnesus; and some authors report that he had even conversed with Homer himself. Meantime, under the weak sway of Charilaus, Sparta was in a state of anarchy. On his return, finding the two kings as well as the people to be weary of their condition, and that he was regarded as the man to correct the disorders of the state, he undertook the task, and with this view consulted the Delphian oracle. Receiving strong assurances of divine encouragement, and also mere special instructions, which were the primitive *rhētra* of his constitution, he suddenly presented himself in the agora, with 80 of the most distinguished Spartans, all in arms, as his guards and partisans. King Charilaus at once consented to second the designs of his uncle, and the bulk of the Spartans submitted to the venerable Heraclid, who appeared both as a reformer and as Delphic missionary. "Lycurgus," says Grote, "does not try to make the poor rich nor the rich poor; but he imposes upon both the same subjugating drill, the same habits of life, gentlemanlike idleness, and unlettered strength, the same fare, clothing, labors, privations, endurance, punishments, and subordination. It is a lesson instructive at least, however unsatisfactory, to political students, that with all this equality of dealing he ends with creating a community in whom not merely the love of preëminence, but even the love of money, stands powerfully and specially developed." The successful imposition of this discipline upon a state which had grown up without it must have been a work of extreme difficulty, and must have required the combination of great genius and personal authority on the one hand with imminent peril on the other. Having obtained for his institutions the approbation of the Delphic oracle, he exacted from his countrymen a promise not to alter them till his return, left Sparta, and was never again heard from. The immediate effect of his legis-

lation, which remained nearly unchanged for 5 centuries, was to raise Sparta from insignificance to great power and comparative eminence as a state. (For an account of the constitution of Lycurgus, see SPARTA.)

LYCOURGUS, an Attic orator, born in Athens about 896 B. C., died there in 323 B. C. He first devoted himself to the Platonic philosophy, but afterward became a disciple of Isocrates. In 343 he was sent with Demosthenes on an embassy to counteract the intrigues of Philip. In 337 he was elected guardian of the public revenue for a term of 5 years, and continued in office for 3 consecutive terms. He was also appointed superintendent of the city, and censor, and in the latter capacity caused his own wife to be fined for violating one of his sumptuary enactments. He belonged to the party of Demosthenes, and was one of the 10 orators whose surrender was demanded by Alexander, but the people of Athens refused to give him up. Of the prosecutions which he conducted, the most celebrated was that against Lysicles, who had commanded the army of Athens at Chæronea; Lysicles was condemned to death. There were 15 orations of his extant in the ages of Plutarch and Photius, but all have since perished except that against Leocrates, and some fragments.

LYDGATE, JOHN, an English Benedictine monk and poet, born in Lydgate, Suffolk, about 1375, died in Bury St. Edmund's about 1461. After studying at Oxford, and visiting France and Italy, he entered the monastery of Bury St. Edmund's, and established a school for instructing the sons of the aristocracy in versification and composition. He began to write about 1400. The principal of his works are his "Fall of Princes," "Storie of Thebes," and "Historie, Siege, and Destruction of Troye." His minor poems were published by the Percy society in 1840. Ritson, in his *Bibliographia Poetica*, gives a complete catalogue of his works.

LYDIA, an ancient country of western Asia Minor, bounded N. by Mysia, E. by Phrygia, S. by Caria, and W. by the Ægean sea or Grecian archipelago. The precise boundaries, however, are uncertain on account both of frequent variation and of want of precision in the ancient descriptions. In the time of the Roman dominion Lydia seems to have extended N. as far as the range of mountains called Sardene, a S. W. branch of the Phrygian Olympus, and S. to the Meander, or at least to the Messogis range, which forms the N. margin of the valley of that river. The E. boundary is especially uncertain. The western strip on the coast, which contained most of the Greek colonies of Ionia, and a part of those of Æolia, was not generally included under the name of Lydia. The Tmolus, a chain of mountains spreading from the eastern portion of the Messogis to the coast of the Ægean, and terminating in a peninsula opposite the island of Chios, divided Lydia into two unequal parts, the northern of which embraced the fertile plain of the Hermus, and the

southern the valley of the Cayster. An affluent of the Hermus was the Pactolus, celebrated in antiquity for its golden sands, though not the only stream in the country which by its gold washings contributed to the extraordinary riches of its kings. The natural wealth of Lydia and its excellent climate made it one of the early seats of civilization in western Asia, and there can hardly be any doubt that in various things it became the instructor of its Grecian neighbors.—The origin of the Lydian people is a matter of controversy among the most eminent critics of our age, the prevailing opinion being in favor of their affinity to the Carians, Mysians, Pelasgians, and other Indo-European tribes; while Bunsen, O. Müller, Lassen, and others are inclined to regard them as Semites. Their connection with the Tyrrhenians or Etruscans by Herodotus will naturally be regarded as a confirmation of the latter opinion by those who contend for a Semitic derivation of that ancient Italian people. Another argument is found in the fact that Herodotus mentions Ninus, son of Belus, both of which names are so conspicuous in Assyrian history, as the ancestor of the kings of the 2d or Heraclidic dynasty of Lydia; but the weight of this statement is destroyed by the strange connection of the same line with Alcæus, son of the Grecian Hercules, which occurs in the same historian. Herodotus remains, however, the principal authority for the early history of Lydia, the few extant fragments of the earlier native writer Xanthus and others being of little importance or historic value. According to Herodotus, the people of Lydia, who were previously called Mæonians, under which name they appear in Homer, received the appellation by which they were later called from their 3d king Lydus, son of Atys, son of Manes. This dynasty, however, which is known as that of the Atydæ, is entirely mythical. The 2d dynasty, which may be styled semi-mythical, that of the Heraclidæ, descended from Hercules and the slave girl of Jardanús, ruled "for 22 generations of men, a space of 505 years," the first king being Agron, son of Ninus, and the last Candaules, "whom the Greeks call Myrsilus," son of Myrsus. This Candaules perished through a conspiracy of his wife with Gyges, one of the king's body guard, who founded the 3d or historical dynasty, that of the Mermnadæ (according to Rawlinson, 724 B. C.). Enraged by the murder of their rightful king, the people rose in arms against the usurper, but he came to terms with them, and was confirmed on the throne by a favorable decision of the Delphic oracle. This he rewarded by magnificent presents sent to the shrine of Apollo, which in the time of Herodotus proved the splendor of the court of the early Mermnadæ. Gyges commenced his reign by warlike incursions into the territory of Miletus and Smyrna, and took the city of Colophon, thus introducing the long series of Lydian aggressions which terminated with the subjection of the Greeks of Asia Minor under

Croesus. The greatest part of his reign, however, was peaceful. His son and successor Ardys (686-67) took Priene and made war upon Miletus. In his reign the Cimmerians, driven from their homes N. of the Caucasus by other northern nomads, entered Asia Minor, and captured Sardis, the capital of Lydia, all but the citadel. It was not until the 3d generation, under the long reign of Alyattes (625-568), the son and successor of Sadyattes, that the Lydians were able finally to expel the invaders, who had committed frightful ravages all over Lower Asia. Alyattes continued the war with Miletus, which had been resumed by his father, but could not achieve the conquest of that city. He took Smyrna, but met with great disaster in an attempt on Olazomenæ. The most important war of this king, however, was waged against Cyaxares of Media, who, having subverted the Assyrian monarchy, had extended the limits of his dominions as far W. as the Halys. The war was carried on for 6 years with varying success, and was terminated by a peace brought about by the allies of the contending parties after a battle which was interrupted by that eclipse of the sun so renowned in antiquity, and predicted, it is said, by Thales, the Milesian philosopher. The peace was cemented by the marriage of a daughter of Alyattes with the heir apparent to the Median throne, Astyages, who thus became the brother-in-law of Croesus, the last king of Lydia (568-54). This king, whose proverbial riches and mutations of fortune have been immortalized by some of the most interesting narrations of Herodotus, had gradually subdued Ephesus and all other Greek cities in western Asia Minor, and all other territories W. of the Halys, except Lycia and Cilicia, when he determined to revenge the wrongs of Astyages, who had been deprived of his throne by his young grandson Cyrus, and declared war against the Persian conqueror. This ended with the taking of Sardis, the captivity of Croesus, and the subjugation of Lydia. The Lydians, who had long before practised various arts of peace, including the weaving and dyeing of fine fabrics, metallurgy, coining of money, and music, in all of which they excelled, being now deprived of their independence, and forbidden by Cyrus to wear arms, gradually sank into luxury, which afterward proved contagious and pernicious to their conquerors. Together with Mysia, Lydia formed the 2d satrapy of the Persian empire, Sardis being the seat of the satrap. After the conquest of Persia by Alexander, it frequently changed masters, and belonged among others to Antiochus the Great of Syria at the time of his defeat at Magnesia by the Romans. It was given by the victors to the kingdom of Pergamus, and after the death of the last Attalus became a part of the Roman proconsular province of Asia. The effeminate Lydians early disappeared as a people, but the name of the country survived under the Byzantine emperors. Its territories are now chiefly included in the

districts of Sarukhan and Aidin in the Turkish pashalic of Anatolia.

LYDIAN STONE, BASANITE, or TOUCHSTONE, a velvet-black quartz or flinty jasper, used for testing gold alloys. The metal when rubbed upon the stone leaves a portion upon the black surface; and this being touched with a drop of nitric acid indicates to the experienced eye the comparative purity of the alloy by the color. Suitable pieces of quartz for this use were originally obtained in Lydia, whence the name.

LYE, EDWARD, an English clergyman and philologist, born in Totness, Devonshire, in 1704, died in Yardley-Hastings, Northamptonshire, in 1767. He was specially devoted to the Saxon and Gothic languages. His first work was an edition of the *Etymologicum Anglicanum* of Junius, from the unpublished MSS., which appeared in 1748. He next published the "Gothic Evangelists" of Ulfilas; but the chief labor of his life was the compilation of a large dictionary of the Anglo-Saxon and Gothic languages, which was finished just before his death (2 vols. fol., 1772).

LYELL, SIR CHARLES, a British geologist, born in Kinnordy, Forfarshire, Nov. 14, 1797. At Midhurst in Sussex he was prepared for Exeter college, Oxford, at which he received in 1819 the degree of B.A., and in 1821 that of M.A. He then entered upon the practice of the law, but soon abandoned it in order to devote himself to geological pursuits, his natural taste for scientific studies being stimulated by the lectures of Dr. Buckland, professor of geology at Oxford. At this period mere geological speculations, for which the previous half century had been distinguished, had given place to a sounder system of investigation, and geologists were busily engaged in collecting materials, out of which theories might afterward spring forth. Lyell entered earnestly into this work, and his early papers, published in the "Transactions of the Geological Society" and in "Brewster's Journal of Science" in 1826 and 1827, chiefly upon the recent deposits of Forfarshire, Dorsetshire, and Hampshire, display remarkable powers of observation; while his use of the phenomena to illustrate and explain the mode of formation of similar deposits of a more ancient period exhibit a readiness to detect points of resemblance for which his subsequent writings are especially distinguished. In Jan. 1830, appeared the first volume of his "Principles of Geology." (See GEOLOGY, vol. viii. p. 162.) It rapidly went through several editions, and was received with the greatest interest for the variety of instructive facts brought together from the observations of the author and from others gathered from all parts of the world, for the clear and attractive style in which these were presented, and more than all for the skill with which the operations now going on were made to explain those of past periods, and to account for the present condition of the surface of the earth. In successive editions the work so increased, that in 1838 the author divided it into

two distinct treatises, retaining in one, which he called "Elements of Geology," the description of the formations of past epochs; and giving in the other, "The Principles," the description of processes now going on by which the phenomena of the older formations are explained. In the edition of 1851 the "Elements" appeared with the title of "Manual of Elementary Geology." These works placed their author in the first rank among geologists, and gave to the science itself a new character, removing from it all dependence upon visionary speculations by showing how its principles should be deduced in the true system of inductive philosophy from well observed facts.—In 1841 Lyell visited the United States, having been invited to deliver a course of lectures on geology in Boston. He availed himself of the opportunity to travel over a large portion of the northern and middle states, and as far south as Kentucky, giving especial attention to the geological features of the country, and learning also by intercourse with the geologists and naturalists of the several states the results of their investigations. He also studied the different institutions of the country, particularly those of learning; and in a year thus spent in the United States, in Canada, and Nova Scotia, he gathered a vast fund of information, some of the fruits of which are presented in his work entitled "Travels in North America in the years 1841-'2" (2 vols. 8vo., London, 1845; 2d ed., 1855). The scientific matter contained in this book was prepared chiefly for the general reader; his more extended observations were presented in numerous papers published in the "Proceedings" and "Transactions" of the geological society of London, the "Reports of the British Association," and the "American Journal of Science." This work contained the most complete geological map of the United States ever published, in the compilation of which Lyell was greatly aided by Prof. James Hall of Albany, and the various state geological reports.—In Sept. 1845, he again embarked for the United States, and remained in the country until June, 1846. He visited portions of the northern states which he had not before seen, and devoted nearly 6 months to a tour through the southern states. He examined the most interesting localities of the tertiary formations in the states bordering the Atlantic and the gulf of Mexico, passed up the Mississippi river, making many interesting observations of the deposits upon its banks and the influence of so mighty a stream as a geological agent, and in southern Missouri visited the sunk country of New Madrid devastated by the earthquake of 1811-'12. In 1849 he published "A Second Visit to the United States" (2 vols. 8vo., London; 3d ed., 1855). Everywhere his observations were extended beyond the geological structure of the country, and included the manners and customs of the people he met with, and their various institutions; and his criticisms upon these are expressed in a liberal and philosophical spirit.—In the modern

progress of geology Lyell's name is more identified with the arrangement of the tertiary formations than with any other department. He first classified them into groups distinguished by the relative proportion of living and extinct species of fossil shells which they contained, and gave them the names of eocene, miocene, pliocene, and pleistocene, founded on this distinction, as described in the article *Geology*. He has investigated with especial care all those great natural phenomena in progress which involve long periods of time, and has undertaken to give approximate estimates of the time already expended, based upon the results produced and the rate at which these are now developed. Thus, in visiting active volcanoes (see *Erna*), he sought to approximate the age of the successive piles of lava from data afforded in modern times of their rate of increase. In examining the region of extinct volcanoes of central France, he applied the same method of reasoning to show that vast periods must have elapsed while the successive volcanic and fluvial deposits were produced. In the United States he at once sought Niagara to trace the work of the mighty cataract in wearing back its way toward Lake Erie, and to estimate the time this has been going on; and in his second visit he found in the Mississippi river, and the vast delta of its sediments deposited near the gulf, material for another class of calculations of the same general character. In 1848 he merited distinction which Lyell had attained was recognized by the crown in conferring upon him the honor of knighthood; and in 1855 he received from the university of Oxford the degree of D.C.L. He is one of the most active members of the British association, as also of the geological society, of which he was elected president in 1836 and again in 1850.

LYGODIUM, the generic name of a beautiful plant known as the climbing fern. The species common to the United States is *L. palmatum* (Swartz), with slender, flexible, and twining stalks growing 3 or 4 feet long; its leaves are rounded, heart-shaped, palmately many-lobed fronds; these as they grow on the upper portions of the plant become narrow, several times forked, and make a sort of terminal panicle bearing abundant seed dots (*sori*). Its habit is to twist itself upon bushes, and thus to climb several feet high. It may be found from Massachusetts to the southern states, though sparingly in the latter.

LYING TO, a nautical manoeuvre by which in a heavy sea a vessel has her sails and helm so adjusted as to bring her head close to the wind, and thus receive the full force of the waves upon her bow. This is resorted to as a measure of safety when the vessel is likely to be endangered by keeping her course; she is put under such canvas as she will best bear, and lying close to the wind rides the waves more securely than in any other position, and makes comparatively little headway. It is also frequently used to merely retard the progress of a vessel for

some temporary purpose, or in the evolutions of a battle.

LYKINS, an E. co. of Kansas, bordering on Mo., and drained by the Osage river and its branches; area about 600 sq. m.; pop. in 1859, 3,012. The principal town is Osawatamie, at the confluence of the Osage and Potawatamie creek.

LYLY, JOHN. See **LILLY**.

LYMAN, PHINEAS, an American soldier, born in Durham, Conn., about 1716, died in West Florida in 1775. He was graduated at Yale college in 1738, and subsequently practised law in Suffield. In 1756, being commander-in-chief of the Connecticut militia, he served with Sir William Johnson at the battle of Lake George, and, after his commander had been disabled, conducted the engagement to a prosperous conclusion. He was present at the unsuccessful attack upon Ticonderoga by Abercrombie, and at the capture of Crown Point and the surrender of Montreal; and in 1762 he commanded the provincial troops in the expedition against Havana. Subsequently he passed many years in England in efforts to procure a grant of land on the Mississippi for the purpose of establishing a colony, and in 1775 embarked with his eldest son and some others for the country in question. He died in West Florida on his way thither, a short time after his son. The emigrants who followed him encountered many misfortunes, and after the subjugation of the country by the Spaniards in 1781-'2 were obliged to take refuge in Savannah.

LYMPH, the fluid found in the lymphatics, or the absorbent vessels distributed abundantly over the body, and especially to the skin and subcutaneous areolar tissue. (See **ABSORPTION**.) The lymphatics are found in all animals which have a lacteal system, the two forming one set of vessels; but, while the lacteals begin on the intestinal walls for the purpose of taking up the nutrient chyle, the lymphatics arise in fine plexuses in most of the vascular tissues, both superficial and deep-seated; generally accompanying the veins, and like them converging to larger and larger trunks, they pass through a series of glandular bodies (see **GLAND**), and finally empty their contents into the thoracic duct with the elaborated chyle, which thence pass into the venous circulation near the heart. Lymph nearly resembles chyle, containing, however, only a trace of fatty matter and less albumen and fibrine; this resemblance and its ultimate passage into the blood show that it is a nutritious fluid, and not excrementitious as maintained by Hewson and Hunter; the effete matters are probably carried off by the venous system, as we find very little trace of lymphatics in the muscles and nervous centres in which the greatest interstitial changes are continually going on; there is also no trace of excrementitious matter in lymph. Lymph resembles diluted *liquor sanguinis*, and is doubtless chiefly derived from this portion of the blood which has transuded through the walls of the capillaries in a comparatively crude state, and requires the elaborating action of the

lymphatics, as the chyle does that of the lacteals, before it is fit to be poured into the circulation; the lymphatics also take up such partially disintegrated results of the waste of the tissues as are capable of reassimilation, by a kind of universal internal digestive process. Lymph is transparent, while chyle is opaque, the former having none of the minute particles which constitute the molecular base of the latter; it generally contains a considerable number of corpuscles, resembling the colorless corpuscles of the blood. From experiments made on dogs by Bidder and Schmidt, it is inferred that the mingled amount of lymph and chyle daily poured into the circulation in man is 28½ lbs., or as much as the entire mass of the blood, having, however, not more than one third of the solid matter of the latter; and of this at least 22 lbs. is lymph, which has passed out of the circulation only to be returned to it again. According to Dr. G. O. Rees, lymph and chyle on analysis present the following composition:

Constituents.	Lymph.	Chyle.
Water.....	96.586	90.287
Albuminous matter (coagulable by heat)...	1.200	8.516
Fibrinous matter (spontaneously coagulable).....	0.190	0.870
Animal extractive matter, soluble in water and alcohol.....	0.240	0.889
Animal extractive matter, soluble in water only.....	1.319	1.238
Fatty matter.....	a trace	8.601
Salts—alkaline chloride, sulphate, and carbonate, with traces of alkaline phosphate, oxide of iron.....	0.565	0.711
Total.....	100.000	100.000

The lymph corpuscles, like those of the chyle, are formed by the cells of the vascular and ductless glands of the lymphatic and absorbent system, becoming most numerous in the vicinity of the thoracic duct and the great veins near the heart. These corpuscles are regarded as the early stage of the colorless and red corpuscles of the blood, into either of which they may be metamorphosed, though the former cannot be changed into the latter, having distinct forms and different purposes to serve in the economy; most pass into red corpuscles, but some do not go beyond the colorless condition. (See BLOOD.) In the lower vertebrates the circulation of the lymph is assisted by pulsatile cavities called lymphatic hearts; these are wanting in man and mammals, and the onward flow is effected by the contractile fibrous coat of the vessels themselves, which have an alternate movement of contraction and relaxation in successive portions; there is also a *vis a tergo* arising from the continual introduction of fresh fluid at their origins, which is aided by the pressure of the surrounding tissues, and the action of their interior valves prevents the passage in a backward direction. The term "coagulable lymph" has been erroneously applied to an inflammatory exudation, capable of passing spontaneously into organized tissue, in proportion to the amount of fibrine it contains, and under unfavorable circumstances prone to degenerate into pus.

Mr. Paget makes two forms of it, the fibrinous and the corpuscular, the former coagulating into a fibrous clot, the latter not thus coagulating, but forming an aggregation of cells; the former is the characteristic of adhesive, the latter of suppurative inflammation.—For details on the lymph and its conservative nature, see Paget's "Lectures on Surgical Pathology."

LYNCH, ANNE CHARLOTTE. See BOTTA, ANNE CHARLOTTE.

LYNCH, THOMAS, jr., one of the signers of the declaration of independence, born in Prince George's parish, S. C., Aug. 5, 1749, perished at sea in the latter part of 1779. He was educated at Eton and at the university of Cambridge, and was subsequently admitted a student in the Temple, London. In 1772 he returned to South Carolina, relinquished the profession of the law, and settled upon a plantation on the North Santee river presented to him by his father. At the outbreak of hostilities in 1775 he was appointed a captain in the first regiment of provincial regulars raised by South Carolina, and by his arduous exertions to recruit his command seriously impaired his health. Being unanimously chosen by the provincial assembly to succeed his father, who was unable through ill health to discharge his duties as a member of congress, he took his seat in that body in 1776, but in a few months was compelled by the precarious state of his own health to retire from active political life. One of his last public acts was to affix his signature to the declaration of independence. In the latter part of 1779, as the only means of saving his life, he was prevailed upon to sail for St. Eustatius, where he could find a neutral vessel which would convey him to France. The ship in which he sailed was never heard from after she had been a few days at sea, and is supposed to have been lost in a violent storm which occurred about that time. Mr. Lynch was one of the most promising of the younger statesmen of the revolution.

LYNCH, WILLIAM F., a captain in the U. S. navy, born in Virginia about 1805. He entered the service as a midshipman, Jan. 26, 1819, became a lieutenant in May, 1828, commander in Sept. 1849, and captain in April, 1856. In 1847 Lieut. Lynch planned an expedition to explore the course of the river Jordan and the shores of the Dead sea, which received the sanction of the government; and in November of that year he sailed for Smyrna in the naval store ship Supply, with a party consisting of Lieut. John B. Dale, Passed Midshipman Richmond Aulick, and 11 petty officers and seamen. Messrs. Henry Bedlow and Henry J. Anderson were subsequently associated with the expedition, the first at Constantinople, and Mr. Anderson at Beyroot. On his arrival at Smyrna, Lieut. Lynch repaired immediately to Constantinople, to obtain the requisite authority from the Turkish government to pass through Palestine. He found no difficulty in accomplishing this, and subsequently in engaging Arabs, camels, &c. On March 31, 1848, the party was landed in the

bay of Acre; in April they were upon the lake of Tiberias, and commenced the navigation of the Jordan to the Dead sea, having for the purpose two metallic life boats constructed by Mr. Francis, which were found to be admirably adapted to the purpose. On April 18 they reached the Dead sea, of which a thorough exploration (including many soundings) was made. In May a portion of the party commenced their return to the Mediterranean by way of Jerusalem, a part remaining to determine by a series of levels the depression of the Dead sea below the Mediterranean; 23 days were occupied in this laborious work, the result coinciding almost precisely with that obtained by Lieut. Symonds, an English officer. The depression was found to be 1,312 feet. Lieut. Lynch's narrative of this expedition has passed through 7 editions, the last published at Baltimore in 1852. He subsequently planned an exploration of western Africa, which was not executed. He is also the author of a volume entitled "Naval Life, or Observations Afloat and on Shore: the Midshipman" (12mo., New York, 1851).

LYNCHBURG, a town of Campbell co., Va., on the S. bank of James river, 120 m. W. S. W. from Richmond; pop. in 1850, 8,071; in 1860, estimated at 12,000. It occupies a steep acclivity rising gradually from the river bank, and breaking away into numerous hills, whose terraced walks and ornamented dwellings give a picturesque and romantic appearance to the town. About 20 m. in the background rises the Blue Ridge, together with the celebrated peaks of Otter, which are in full view. The town contains 9 churches (1 African, 1 Baptist, 1 Episcopal, 3 Methodist, 2 Presbyterian, and 1 Roman Catholic), a college under the patronage of the Methodist Protestant church, and a flourishing female academy. Tobacco manufacturing is the chief business. About 70 factories and stemmeries are in operation, giving employment to more than \$1,000,000 of capital. Lynchburg is supplied with water by a reservoir constructed in 1828, at an expense of \$50,000. This reservoir is situated at a point 253 feet above the level of the James river, and is capable of containing 400,000 gallons of water, which is forced a distance of 2,000 feet by a double force pump, worked by a large breast wheel. It is in contemplation to enlarge and extend these works. There are 4 iron founderies, together with a machine shop owned by the Virginia and Tennessee railroad company, 3 flouring mills, 2 daily newspaper establishments, 3 printing offices, a bank, 3 branch banks, and a savings institution. Lynchburg is favorably situated for a large inland commerce, and for manufactures. It has tributary to it a great extent of magnificent country, enjoys almost inexhaustible water power, which is yet however undeveloped, and is in the neighborhood of vast fields of coal and iron ore. The celebrated Botetourt iron works are not far distant. Lynchburg is connected with all parts of the country by the James river and Kanawha

canal, and the Virginia and Tennessee, the South Side, and the Orange and Alexandria railroads. It was laid out in 1786.

LYNDHURST, JOHN SINGLETON COPLEY, baron, an English statesman, and ex-chancellor of Great Britain, born in Boston, Mass., May 21, 1772. He is a son of the artist Copley, went with his mother and sisters to England in his 3d year, and was educated under a private tutor and at Trinity college, Cambridge. He received the degree of bachelor of arts in 1794, when he shared with one associate the highest honors of the university, and subsequently became a fellow of the college. His appointment also of "travelling bachelor" gave him an opportunity of visiting the United States and Canada. He returned to England in 1798, was called to the bar in 1804, went on the Midland circuit, and rose slowly to eminence in his profession. He had obtained the leadership of the circuit, when in 1817 he attracted general attention by his part in the defence of Watson, charged with high treason as one of the rioters at Spa-fields. He was also in that year counsel for the crown in the prosecution of Brandreth, who was executed for high treason as a ringleader of the Derby tumults. Though his politics had originally been liberal, he entered parliament in 1818 under tory auspices, was soon after knighted, and was solicitor-general in the Liverpool administration from 1819 to 1823. In 1820 he assisted in managing the trial of Queen Caroline by the house of lords. He succeeded to the attorney-generalship in 1824, was returned in 1826 with Viscount Palmerston as member for the university of Cambridge, and a few months later was made master of the rolls. In 1827 he opposed the bill for Roman Catholic emancipation, though under Mr. Canning, who immediately after formed a cabinet on liberal principles, he accepted the chancellorship on the retirement of Lord Eldon, and was raised to the peerage as Baron Lyndhurst of Lyndhurst (April 27). He retained the great seal through the Canning, Goderich, and Wellington administrations, favoring the reformatory views of the first and the concessions of the last, advocating in 1828 the repeal of the test and corporation acts in opposition to Lord Eldon, and in 1829 supporting the scheme of Catholic emancipation. He resigned his office on the accession of Earl Grey to power in 1830, but this ministry extended to him in 1831 the judicial station of lord chief baron of the exchequer, which he held until 1834, and in which he earned high reputation as a judge. He was one of the most strenuous opponents of the reform bill, was prominent in effecting the defeat and consequent resignation of Earl Grey's ministry on May 7, 1832, and was the chief adviser of the duke of Wellington in his fruitless attempt during the next 5 days to form a tory cabinet. On the formation of the first Peel ministry in 1834 he was restored to the chancellorship, and relinquishing it after the resignation of this ministry, which soon followed, he became one of the most

effective leaders of the opposition. In 1835 he proposed in the house of lords amendments to the municipal reform bill, which were unexpectedly accepted by the commons, and which proved less injurious to the operation of the law than was anticipated by the tory party. He efficiently resisted the claims urged by the Roman Catholics of Ireland, and became especially formidable from his custom of reviewing annually the measures of each parliamentary session in speeches remarkable for their sarcasm and brilliancy. When Sir Robert Peel returned to power in 1841, the great seal was for the third time offered to Lord Lyndhurst. The fall of the Peel ministry in 1846 he regarded as the termination of his public life; but he has since then occasionally taken a prominent part in the debates in the house of lords. He gave his cordial support to the Derby ministry in 1852, advocated the war with Russia, made a masterly exposition of the policy of Prussia in 1855, and denounced the peace concluded at Paris in 1856 as a virtual capitulation on the part of England. He has continued in his advanced age one of the ablest orators in parliament, and one of the chief advisers of the conservative party. By his first wife, widow of Lieut. Col. Charles Thomas, who fell at Waterloo, he had 3 children. She died in 1834, and 3 years afterward he married, at the age of 65, Miss Georgiana Goldsmith, a young Jewish lady celebrated for her beauty, by whom he has had a daughter.

LYNN, a city of Essex co., Mass., 9 m. N. E. from Boston, on the eastern railroad; pop. in 1860, about 13,000. Its limits include a large plain in the S. and W. sections, extending back from Massachusetts bay, and raised but a few feet from the water level; a range of hills in the rear; a number of ponds known as the lakes of Lynn, beyond these; and in the N. E. an elevated plain, the most pleasant and healthy portion of the town. There can scarcely be said to be any business centre of the town. Lynn is best known as the oldest and still one of the most prominent of the shoe manufacturing towns of New England, the business consisting mainly of the production of women's and children's shoes. Full and accurate statistics are not obtainable; the most trustworthy give the number of pairs of boots annually manufactured as 3,274,873; shoes, 6,000,700 pairs; value of annual production, \$4,165,529; females employed, 11,021; males, 4,545. Several branches of trade incidental to shoemaking also employ considerable capital. There are 11 leather currying establishments, employing 196 persons and about \$76,000 capital, producing finished leather annually to the value of \$407,485. The value of lasts annually manufactured is \$15,320. There are 1 high, 7 grammar, 9 intermediate, and 24 primary schools, 18 churches (2 Baptist, 1 Christian, 3 Congregational, 1 Episcopal, 1 Friends', 7 Methodist, 1 Roman Catholic, and 2 Universalist), a library association, 3 weekly newspapers, 3 banks of issue and discount with an aggregate capital of \$550,000, 2 savings

banks, 3 insurance companies, and 2 loan and fund associations.

LYNN, ELIZA, an English authoress, born in Cumberland county in 1828. She is one of 12 daughters. Her father was a clergyman, her mother the daughter of a bishop. She spent the early part of her life alternately at Gad's Hill, Rochester, and Keswick, and afterward resided for some time in London. She published in 1846 "Azeth, the Egyptian," a story founded on an Egyptian tradition, and in 1848 "Amy-mone," a romance of the times of Pericles. In 1851 appeared her "Realities," a work of fiction of modern life. She has since actively contributed to periodical literature.

LYNN-REGIS, or KING'S LYNN, a parliamentary borough and seaport of Norfolk, England, on the Great Ouse near the Wash, 38 m. W. N. W. from Norwich; pop. in 1851, 19,355. Four small rivulets called fleets, crossed by numerous bridges, intersect the town in various directions. On the land side it was formerly surrounded by a fosse, defended by 9 bastions and flanked by a strong embattled wall, of which extensive ruins still remain. The town is lighted with gas and well built; but the streets, excepting the newer ones, are narrow. St. Margaret's church, founded in the 12th century, is a handsome edifice of freestone; the chapel of St. Nicholas, erected in the 14th century, is one of the finest in the kingdom, in the Gothic style, 200 feet in length and 78 feet in breadth. The situation of Lynn gives it many commercial advantages, and it has long had an important trade. It exports corn, wool, sand for glass, and various manufactures, and imports coals, timber, hemp, wine, cork, tallow, &c. There are ship yards, breweries, malt houses, cork-cutting establishments, and sail cloth, sack-ing, and rope and twine manufactories. The borough sends two members to parliament.

LYNX, a carnivorous animal, usually arranged with the cats, but differing from the genus *felis* in wanting the small upper premolar next the canine, the dentition being—incisors $\frac{3}{1}$, canines $\frac{1}{1}$, and molars $\frac{3}{3}$ — 28; the head is short and arched; jaws short; ears short, erect, and more or less tufted; fore feet with 5 toes, and hind feet with 4, with retractile nails; tail as long as or shorter than the head, and truncated at the tip; body short and stout. There are certain differences in the skull also, which justify a separation from *felis*, and the acceptance of the genus *lynx* (Raf.). The largest American species is the Canada lynx (*L. Canadensis*, Geoffr.), the *loup cervier* of the Canadians; it is about as large as a setter dog, or 8 feet long to the base of the tail, the latter being 6 inches to the end of the hair; the triangular ears have an erect tuft of coarse black hairs; the general color is gray above with darker clouds, and lighter beneath; the feet very large, with naked pads underneath, densely furred in winter, and then making a track in the snow 9 inches long and almost as large as that of a black bear; the eyes large, nose obtuse, ears with a narrow

margin of black, whiskers stiff and chiefly white; in summer the fur is shorter and more rufous. This lynx lives in the deepest woods, rarely approaching the habitations of man, and is most abundant in the arctic regions north of the great lakes, its thick fur enabling it to resist the greatest cold; it is very strong and active, an excellent climber, and a good swimmer. It breeds once a year, having generally 2 whelps at a time. Its flesh is eaten by Indians and hungry trappers, and its fur is prized for robes, muffs, collars, &c.; it is most often caught in steel traps, which it readily enters. It feeds principally on grouse and birds of similar size, on rabbits and other northern rodents; when hard pressed it will attack as large an animal as a deer, and sometimes prowls about the pioneer's cabin in search of lambs, pigs, and poultry. It rarely descends into the New England and middle states, but is found principally from Canada to lat. 66° N., to the east of the Rocky mountains. The bay lynx (*L. rufus*, Guld.), the American wild cat, has been described under BAY LYNX; there are varieties of this in Texas and Mexico and on the Pacific coast, described as *L. maculatus* (Aud. and Bach.) and *L. fasciatus* (Raf.). Temminck believes that the Canada lynx is found also in Europe, having given it the specific name of *borealis*, which others think a distinct species.—The European lynx (*felis lynx*, Linn.) is about the size of the Canada species, but the color is deeper rufous with more distinct brownish spots; the hair is shorter, and the tail longer, more tufted, with the terminal half black. It is spread over southern Europe and Asia, and furnishes a considerable quantity of valuable fur for robes and coverings; its physiognomy is much less ferocious than that of the cats of the same size. The booted or marsh lynx (*L. caligatus*, Temm.) is smaller than the preceding species, with a longer tail; the color is bluish gray, with indistinct transverse blackish bands, reddish below, the long ears tipped with a blackish pencil, and a large patch of black on the leg extending nearly to the first joint (whence the common name of this species), and the tail black at the end, and above this 2 or 3 rings of black and white. The chaus is probably a variety; both are found in Asia and northern Africa. The caracal (*L. caracal*, Linn.; genus *caracala*, Gray) is of a vinous red color, whitish below and around the head and throat; it is about 2½ feet long and 20 inches high, and the tail reaches to the heels; the ears are also very long, and tufted. This is the animal called lynx by the ancients, supposed by them to possess a wonderful power of sight, and said to have been kept and trained for the chase like the hunting leopard (*F. jubata*, Schreber); there is no such faculty in the modern animal, which is very restless and suspicious in confinement. It possesses the activity and carnivorous propensities of its congeners, pursuing its prey, whether bird or quadruped, into trees; according to Temminck, this species hunts in packs like dogs, tracing prey by the scent,

and also eats the leavings of the lion and larger carnivora; these dog-like habits may indicate the lynx as one of the animals connecting the cats with the dogs. It is found in Asia and Africa. Other species are described.

LYON, GEORGE FRANCIS, an English traveller and author, born in Chichester in 1795, died on the passage from America to England in 1832. He entered the naval service in 1809, was present at the attack on Algiers by Lord Exmouth in 1816, and in 1818 was commissioned to accompany Mr. Joseph Ritchie on his tour of exploration into central Africa. Ritchie died at Moorzook in Fezzan, where the travellers were detained through the want of funds and the treacherous conduct of the bey of the province; but Lyon returned to England, after encountering many dangers and privations, and published his "Narrative of Travels in Northern Africa" (4to., London, 1821), a work abounding in useful information on the geography of central Africa, and of which the geological portion was prepared by Dr. Buckland. In 1821, in command of the Hecla, he accompanied Capt. Parry on his 3d arctic expedition, publishing on his return "The Private Journal of Captain G. F. Lyon," &c. (8vo., London, 1824). In 1823 he made an unsuccessful attempt in the Griper to enter Repulse bay in the arctic regions, through Sir Thomas Rowe's Welcome, of which he also published a narrative. Subsequently he passed several years in Mexico, and died on his return from a second visit to America. His remaining works are: "The Sketch Book of Capt. F. G. Lyon during 18 Months' Residence in Mexico, No. 1" (London, 1827), and "Journal of a Residence and Tour in the Republic of Mexico in 1828," &c. (2 vols. 8vo., 1828).

LYON, MARY, an American teacher, founder of the Mount Holyoke female seminary, born in Buckland, Mass., Feb. 28, 1797, died in South Hadley, Mass., March 5, 1849. When 17 or 18 years of age, she taught her first school at Shelburne Falls. At the age of 20 she became a pupil at the Sanderson academy, Ashfield, where, as her means would allow her to remain but a short time, she slept but 4 hours out of the 24, and devoted to study all the rest of her time, except that occupied by her hurried meals. In 3 days she committed to memory and recited with perfect accuracy all of Adam's Latin grammar that was usually learned by students. To provide means for further study, she taught for several seasons, attending the best schools she could find in the intervals. In 1821 she entered the school of the Rev. Joseph Emerson, at Byfield, near Newburyport; and in the autumn of this year, and for two years subsequently, she taught in the Sanderson academy. While thus engaged she was invited to become an associate principal with Miss Z. P. Grant of the Adams female academy at Londonderry, N. H.; and having accepted the invitation, she spent the winter and spring of 1824 at Amherst, under the instruction of Prof. Eaton, qualifying herself to give experimental instruction in chemistry. The

Adams female academy, under the management of Miss Grant (afterward Mrs. Banister) and Miss Lyon, assumed a character entirely unknown previously in female schools in this country. The principles afterward adopted so successfully at Rugby, by Dr. Arnold, here found their first exponents; and the substitution of conscientiousness and benevolence for emulation as motives to progress and good conduct, which subsequently formed so marked a feature of the schools at Ipswich and South Hadley, were first adopted at Londonderry. Owing partly to the severity of the climate, the school at Londonderry was closed in winter. During this season Miss Lyon taught a school in her native town, which was continued there, and in the adjoining town of Ashfield, for 6 years. Beginning with about 20 pupils, the number increased eventually to 100, the greater part of them young women above 18 years of age. In 1828 Misses Grant and Lyon removed to Ipswich, Mass., and were followed by a large number of their pupils. The school at Ipswich was maintained through the year, but for two years Miss Lyon spent her winters at Buckland in teaching as before. In 1831, however, the effect of such extraordinary exertion told so severely upon her constitution, that she was obliged to relinquish the Buckland school, and confine herself to Ipswich. For the next 4 years, owing to the impaired health of Miss Grant, the entire charge of the Ipswich seminary rested on Miss Lyon. The establishment of a seminary for girls, embodying the principles hitherto maintained at Ipswich and Londonderry, and at the same time affording its advantages at a low price, in order to collect there young women who, like herself, were possessed of very moderate means, had long occupied her thoughts; it was henceforth to be the great purpose of her life. On this subject Miss Lyon corresponded extensively with clergymen and friends of education in Massachusetts, and a plan for such an institution, to be called the New England female seminary, was drawn up, and trustees were appointed; but unforeseen obstacles defeated the project. In the autumn of 1834 she resigned her connection with the Ipswich seminary, and, amid great discouragements, undertook the work of founding a female seminary on a new system. Aided to some extent by clergymen and others, she succeeded in obtaining contributions, and on Nov. 8, 1837, a part of the buildings having been completed, the school was opened with about 80 pupils, under the name of the Mount Holyoke female seminary, being near the picturesque hill of that name in South Hadley township. It was a feature of her plan, to which she had adhered against great opposition, that the whole domestic labor of the institution was to be performed by the pupils and teachers, each pupil in her turn devoting one hour a day to domestic duties. This was not, as has been stated, with a view to make the seminary a manual labor institution. The price of board and tuition had been put at one half that of

seminaries of the same grade generally, and no compensation was allowed for the time spent in work; but it was intended to make the pupils independent of servants, to teach self-denial, to promote their health, and to preserve their interest in domestic duties. The number applying for admission was from the first greater than could be accommodated, and measures for the erection of additional buildings were commenced in 1839, and the buildings completed in 1842. After the first year the assistant teachers were all graduates of the school. Miss Lyon presided over it for 12 years. The reputation of the school extended, not only over every part of the Union, but to foreign lands. The thorough scholarship, systematic habits, familiar and critical acquaintance with the Scriptures, and earnest and efficient benevolence of its graduates, were everywhere remarked. Between 60 and 70 of its pupils have become foreign missionaries, and a very much larger number are or have been the wives of clergymen, or teachers in the United States or foreign countries. In the course of her life as a teacher, Miss Lyon instructed more than 3,000 pupils, nearly all of whom bore, more or less, the impress of her character. The Mount Holyoke female seminary is still continued, though it does not now stand alone, many of its pupils having founded seminaries on its model. Miss Lyon's only published works are a pamphlet entitled "Tendencies of the Principles embraced and the System adopted in the Mount Holyoke Female Seminary" (1840), and the "Missionary Offering" (Boston, 1843).—See "Power of Christian Benevolence, illustrated in the Life and Labors of Mary Lyon," by Edward Hitchcock, D.D. (12mo., Northampton, Mass., 1851; 2d ed. 1860).

LYON, MATTHEW, an American politician, born in Wicklow co., Ireland, in 1746, died at Spadra Bluff, Arkansas, Aug. 1, 1822. He emigrated to New York in 1755, and, being too poor to pay for his passage, was assigned by the captain of the ship, in accordance with the practice at the time, for a pecuniary consideration, to a farmer in Connecticut, in whose service he remained a number of years. Subsequently he became a citizen of Vermont, and in July, 1776, was commissioned as lieutenant in one of the companies of "Green Mountain boys." In the latter part of the same year he was cashiered for unnecessarily deserting a post on Onion river; but he subsequently served as commissary-general, and eventually rose to the rank of colonel of militia. After the war he engaged in paper making, iron casting, and a variety of other occupations, and at one time edited a newspaper of an ultra democratic character entitled "The Scourge of Aristocracy and Repository of Important Political Truth," of which the types and paper were manufactured by himself. He married a daughter of Gov. Chittenden, and, becoming an active political leader, was elected in 1797 to congress by the anti-federal party. In Oct. 1798, he was convicted

of a libel on President Adams, and confined for 4 months in the Vergennes gaol, a fine of \$1,000 which had also been imposed upon him being paid by his friends. An attempt to expel him from congress as a convicted felon failed for want of a two-thirds vote. During this congressional term he had a violent personal altercation on the floor of the house with Mr. Griswold of Connecticut, ending in blows; but the motion to expel them was defeated. In 1799, while a prisoner in gaol, he was reelected to congress from Vermont, and after the expiration of his term removed to Kentucky. At the first congressional election held after his arrival he was returned to the house, of which he continued a member until 1811. Subsequently he held the office of U. S. factor for the Cherokee Indians by the appointment of President Monroe, and removed to Arkansas, of which he was the territorial delegate elect to congress at the time of his death. Though rough and impetuous in manner, he was an able debater, and to the end of his life, which witnessed many mutations of fortune, continued a man of active business habits.

LYONNAIS, one of the ancient military divisions of France, comprising the provinces of Lyonnais, Forez, and Beaujolais, and bounded N. by Bourbonnais and Burgundy, E. by Dauphiné, Bresse, and the principality of Dombes, S. by Velay and Vivarais, and W. by Auvergne. Its capital was Lyons. The province of Lyonnais was divided into Lyonnais proper and Franc-Lyonnais, and now forms the departments of the Rhone and Loire and a part of the department of Ain.

LYONNET, PETER, a Dutch jurist and naturalist, born in Maestricht in 1707, died at the Hague in 1789. During the leisure of official duties he turned his attention to natural history, and made additions to a French translation of Lesser's work on the "Theology of Insects," published at the Hague in 1742. In 1744 he executed drawings for Trembley's treatise on the fresh water polypi. In 1760 appeared his great work, *Traité anatomique de la chenille qui ronge le bois de saule*. An injury to his eyesight at the age of 60 prevented the completion of his investigations upon this caterpillar. The latter part of his life was chiefly spent in making a large collection of paintings.

LYONS, a township and village, capital of Wayne co., N. Y., on the Erie canal and the New York central railroad, 44 m. W. from Syracuse, and 86 m. E. from Rochester; pop. in 1855, 5,205; of the village, 8,221. It is drained by the Clyde river, which is formed by the junction of the Canandaigua outlet and Mud creek. The village contains the county buildings, 7 churches, 2 banks, 2 newspaper offices, the Lyons union school with between 800 and 900 scholars, and several manufactories. Among the latter is an extensive manufactory of essential oils, principally peppermint, of which about 10,000 lbs. are produced annually, being $\frac{1}{3}$ of the whole amount made in the United States.

In 1855 there were 1,849 pupils attending public schools.

LYONS (Fr. *Lyon*; anc. *Lugdunum*), the principal manufacturing city of France, and since 1834 one of its most powerful fortresses, capital of the department of the Rhone, situated at the junction of the Saône and Rhone, in lat. 45° 45' N. and long. 4° 49' E., at an elevation of nearly 1,000 feet above the level of the sea, distant by railway 814 m. S. S. E. from Paris, 218 m. N. N. W. from Marseilles, and 100 m. W. S. W. from Geneva; pop. in 1856, of the city and its communes, 292,721, and of the city proper, 255,960. The city proper is chiefly built on a peninsula or tongue of land between the Saône and Rhone. Some extensive quarters, as St. Just, St. George, St. Irénée, Vaise, &c., are situated on the W. or right bank of the Saône, on and around the hill of Fourvières, which is crowned with a tower about 700 feet high, commanding the most imposing view of the city and of the Alps on the E.; and on the left bank of the Rhone are the suburb of La Guillotière, which is divided into two sections by the main street, and the new district of the Quartier des Brotteaux. S. of the city the new and handsome suburb Perrache is rapidly extending toward the peninsula; and on the N., beyond the fortifications, on the declivity of a hill extending from one river to the other, is the commune of La Croix-Rousse, including the suburbs of Serni and St. Clair, and chiefly inhabited by weavers. For municipal purposes Lyons is divided into 5 arrondissements; the 1st comprises the N. and the 2d the S. part of the city, and the 3d, 4th, and 5th include respectively the suburbs of Guillotière, Croix-Rousse, and Vaise, which were annexed to the city in 1852; the 5th arrondissement includes also the whole right bank of the Saône. Even the most repulsive and ancient parts of Lyons, where the narrow and crooked streets and lanes are darkened by the excessive elevation of the houses, which are 7 to 9 stories high, have been rapidly improving within the last 20 years, though still suffering from a bad system of paving and from an over-crowded population. Among the most beautiful streets are those of Algérie and of Constantine, and especially the Centrale, opened in 1853, and the Impériale in 1855, both containing many fine buildings and shops. There are over 50 squares or public places in Lyons, but only a few of them are very attractive. The Place Bellecour, however, is one of the largest squares in Europe. The other leading square is the Place des Terreaux (noted for its intolerable heat in summer), with the Hôtel de Ville and the museum or *palais des beaux arts*. Cinq-Mars and De Thou were executed in this square, and the guillotine was erected there in 1794.—The Saône is spanned by 12 bridges. The principal are those of Nemours, Tilsit or de l'Archevêché, the superb bridge of Mulatière, and the new bridge de la Quarantaine. The Rhone is spanned by 7 bridges, the most noted of which are the suspension bridge

of Louis Philippe, Lafayette bridge, and the bridge de la Guillotière. The quays of Lyons are the most remarkable of Europe; the most celebrated are the quays St. Clair, St. Antoine, and Orleans. The principal public buildings are the city hall and the *palais des beaux arts*. The former is one of the finest of the kind in France, has a front about 150 feet in width, and is flanked with a square tower and dome at either end; the balustrade is ornamented with statues of Hercules and Minerva, and in the centre is a clock tower surmounted by a cupola. The *palais des beaux arts*, or museum, in the ancient convent of St. Pierre, consists of 4 large piles of buildings, devoted to the exchange, chambers of commerce, museum, and collection of arts and science (with some remarkable specimens of Roman antiquity), schools of drawing and natural history, agricultural and other societies, depot of machines for the silk manufacture, &c., and to a public library, which is one of the best provincial libraries in France. Another celebrated public building is the Hôtel Dieu, which was founded by Childebert and his queen in the 6th century, and consists at present of a series of buildings extending along the Rhone and accommodating about 12,000 in-door and a number of out-door patients. The hospital of Antiquailles occupies the site of the ancient palace of the Roman emperors, and is devoted to lunatics and incurable diseases. The cathedral or church of St. John is a remarkable Gothic edifice; the church of St. Nizier is an elegant building of the 14th century; that of Ainay, and the churches of the Cordeliers and of St. Paul, are among the other interesting ecclesiastical structures. The chapel of Notre Dame de Fourvières, although a modest building, is held in high regard on account of its lofty position on the hill of that name, and of its great antiquity. Lyons contains also a Protestant place of worship and a synagogue, and has altogether about 20 Roman Catholic churches and chapels. It is the seat of an archbishop, and has an academy and imperial college, a celebrated veterinary school, a great number of learned, educational, and charitable institutions, a *mont de piété*, 2 savings banks, a branch of the bank of France, and a great number of courts of justice, among which is a *conseil des prud'hommes*, a commercial tribunal, composed half of masters, half of workmen, designed to settle in a conciliatory spirit disputes respecting wages and other matters. There are over 20 printing offices; and the principal journals are the *Courrier de Lyon*, *Gazette de Lyon*, and *Salut public*. The city is the head-quarters of the 8th military division. The fortifications consist of 18 detached forts arranged in a circle of about 13 m. round the city, crowning the hills of St. Croix and Fourvières on the right bank of the Saône, and of La Croix-Rousse above the suburb of that name. They have been built since 1834, in consequence of the outbreaks of that year and of 1831. The chief work, Fort Montessay, has full command of the turbulent suburb of La Croix-Rousse,

which may be entirely cut off from the city by a fortified barrack on the Place des Bernardines. —The total annual value of the goods manufactured in the arrondissement of Lyons is estimated at from \$60,000,000 to \$70,000,000, of which silk forms the largest proportion, giving employment to about 110,000 persons, including only 1,800 females and about 800 children. The jewellers and goldsmiths of Lyons transact a large business, estimated annually at \$1,200,000. In the sham jewelry trade, which amounts to about \$1,500,000, Lyons ranks next to Paris. Carriages, glass and crystal, various kinds of acid, orchil, soft soap, indigo, liqueurs, iron and machinery, leather, colored paper, &c., are all manufactured to some extent in Lyons; its beer is celebrated; the production of felt hats has declined; its dye houses for cotton, silk, and wool are of great importance; woollen shawls are produced to the annual amount of \$2,400,000. All these branches of industry, however, are overshadowed by the silk manufactures. They were introduced into Lyons during the reign of Louis XI. by merchants of Florence and Lucca, and great factories were established in 1586 by Genoese manufacturers. From 1650 to 1680 the silk industry employed from 9,000 to 12,000 looms. After the revocation of the edict of Nantes, when many of the most skilful weavers went into exile and settled at Spitalfields (London), Crefeld (Rhenish Prussia), and other places, the number declined to about 4,000; from 1780 to 1788 it rose to 18,000, but after the revolution fell to 8,000 or 4,000. From 1804 to 1812 the number increased to 12,000; in 1816 it was 20,000; in 1827, 27,000; in 1837, 40,000; in 1848, 50,000; and the number in 1860 is supposed to exceed 60,000, consuming over 6,000,000 lbs. of silk, valued at \$85,000,000. Silk weaving is not conducted in factories, but in the dwellings of the master weavers, each of whom has usually from 2 to 8 looms, which with the greater portion of their fittings are his own property. He and his family keep as many of the looms at work as they can, and employ *compagnons* for the remainder. The latter are not permanent residents, but remain in the city only while there is a demand for their labor. Apprentices and *lanceurs* constitute the rest of the operatives. The former are generally apprenticed from the ages of 15 to 18; the latter are children from 9 to 14, who prepare bobbins and weave fabrics demanding less skill than others. About $\frac{1}{3}$ of the looms are worked by master weavers and the members of their families, nearly an equal number by *compagnons*, and the rest by apprentices and *lanceurs* or children. The silk merchants, of whom there are about 600, supply the raw silk and the patterns to the owners of the looms, to whom is intrusted the task of producing the web in a finished state. Half the wages paid by the silk merchants go to the owners of the looms and half to the laboring weavers. Most of the raw silk reaches Lyons through London, and some also via Paris and Marseilles. Efforts to secure a

more direct trade with the silk-producing countries have however been made by various leading houses. A school of art (*institution de la Martinière*), to which a professor is attached who teaches the adaptation of designs to the loom or the *mise en carte*, and which gives free instruction in drawing and modelling to about 200 pupils, has done much to improve manufacturing skill. The demand from the United States has given a great impulse to the silk industry of Lyons, and led to the manufacture of a cheaper but strong kind of fabric, suited to the American market. In connection with the silk trade is an establishment in the *palais des beaux arts*, called the *condition*, where, by the agency of heat, the unwrought silk is reduced to an equable weight and dryness. The weavers are imperfectly educated, but are not much addicted to intemperance. Continuous hard labor, however, has degraded them physically; they are subject to scrofulous and spinal diseases and rheumatism, and many of them are exempted from military service on account of debility or deformity. The upper and middle classes of Lyons are thriving, and include many families of great wealth. The neighborhood of the city is said to contain 8 times as many villas as that of Paris. One great drawback to the more rapid increase of the industrial establishments is the want of coal. The deficiency of water has been remedied since 1856 through the operations of the great water works company, in connection with the canalization of France. The same company has also introduced a better system of drainage.—The ancient city of Lugdunum was mainly built on the hill of Fourvières (anc. *Forum Vetus*). Munatius Plancus, governor of Gaul, founded there a colony as early as 43 B. C. Augustus, under whom it became the capital of the province (Gallia Lugdunensis), established there a senate, a college of magistrates, and an athenaeum. It also became the centre of the 4 great Roman roads which traversed Gaul. Caligula instituted there games and festivals. Claudius, who was born there, gave to Lugdunum the privileges of a Roman city. In A. D. 58 it was destroyed by fire, but rebuilt by Nero. Trajan, Hadrian, and Antoninus erected in the city many monuments, and also established annual fairs. Afterward, having declared for Albinus, it was pillaged by his rival Septimius Severus after his victory near the town (197). Several martyrs were put to death during the persecutions against the Christians, St. Pothinus among the number, and according to later writers also St. Irenæus. Attila desolated the city in the middle of the 5th century, when most of the great Roman monuments were destroyed, although a few relics of them still remain. From that time until the 14th century the city was successively under the sway of the Burgundians, Franks, German emperors, and its feudal archbishops and municipal council. Under Philip the Fair it was annexed to France. During the following period the city acquired great celebrity by its trade and industry. It was fortified

by Francis I., and embellished with quays and fine edifices under Louis XV. The citizens manifested great enthusiasm in behalf of the revolution of 1789, and subsequently embraced the Girondist party. Afterward they rose against the convention, killing the president of the Jacobin club (Challier), and the city was subjected to a siege by a republican army under Kellermann (Aug. 8, 1793), and compelled to surrender after a heroic resistance of two months. As a punishment the convention doomed the city to destruction. Collot d'Herbois and Fouché were sent there as commissioners; the city and its environs were deluged with blood, and over 2,000 persons were put to death. Under the reign of Napoleon I., when the invention of Jacquard, a native of Lyons, was introduced, the city recovered its prosperity; but it was again shaken in 1814 and 1815, and still more seriously by the commercial crisis which followed the revolution of 1830. A strike for higher wages produced in 1831 a terrible insurrection. The operatives seized the Hôtel de Ville, but evacuated it on the arrival of Marshal Soult and the duke of Orleans. A formidable political outbreak in 1834 could only be quelled after several days' fighting in the streets. A new calamity was added by the inundation of 1840. The revolution of 1848, however, did not create any great disturbances. In 1856 Lyons was desolated by another inundation. An interview between Napoleon III. and the dowager empress of Russia took place at Lyons in June, 1860.

LYONS, GULF OF (Fr. *golfe du Lion*; anc. *Gallicus Sinus*, also *Mare Gallicum*), a gulf of the Mediterranean, on the S. E. coast of France, between a range of the Pyrénées on the W. and a headland near Toulon on the E., washing the shores of the departments of Bouches du Rhone, Gard, Hérault, Aude, Pyrénées-Orientales and part of Var, and the N. E. coast of Catalonia in Spain, extending from the isles of Hyères to Cape Creux for about 165 m., with a breadth of nearly 100 m. The Rhone, Aude, Hérault, and some other rivers flow into the gulf. The principal places on its coast line are Marseilles, Toulon, and Cette. The shores are in many parts intersected by extensive lagoons and low islands, and the gulf is frequently subjected to violent gales. It is said to have been named from the lion, in consequence of the fury of the waves; hence it is occasionally and correctly called by some English authorities gulf of Lion.

LYONS, EDMUND, Lord Lyons of Christchurch, a British admiral, born in the hamlet of Burton, near Christchurch, Hants, Nov. 21, 1790, died at Arundel castle, Sussex, Nov. 23, 1858. His ancestor, Henry Lyons of Antigna, and some time of Philadelphia, was descended from a family settled in King's county, Ireland, in 1622, and married a daughter of Samuel Winthrop, grandson of John Winthrop, first governor of Massachusetts. As early as his 8th year he accompanied Sir Richard Bickerton on a cruise at sea, and 8 years later entered the yacht Royal Charlotte as a volunteer. In 1808

he received his midshipman's warrant, and for several years saw much active service in the Mediterranean. In the latter part of 1808 he went in the *Monmouth* (64) to the East Indies, was soon after appointed acting lieutenant in the brig *Barracouta*, and participated in several brilliant exploits, among which were the escalade of Fort Belgica in the island of Banda Neira, at midnight, in the midst of a terrific storm, and the capture of Fort Marrack in the straits of Sunda. The latter, planned wholly by himself, was accomplished on the night of July 30, 1811, with 85 men, who stormed a fortress mounting 54 heavy guns and garrisoned by 180 troops and the crews of 2 gun boats, demolished a large portion of the building and its armament, and escaped with but trifling loss. Subsequently, in the command of a flotilla of gun boats, he rendered efficient service at the capture of Meister Cornelis; but he was compelled by sickness soon after to return to England, where in 1812 he was promoted to the rank of commander. Two years later he received his commission of post-captain. For many years after the peace he remained on shore. In 1828 he was appointed to the *Blonde*, with which he took part in blockading Navarino, and which, under his command, was the first English man-of-war that ever entered the Black sea. After much important service, including 12 days in the trenches before the Morea castle, the last stronghold of the Turks in the Peloponnesus, he was employed, on the formation of the independent kingdom of Greece, to convey King Otho and his suite to Athens. In acknowledgment of his efficient discharge of many important duties, civil as well as military, he was knighted and appointed British minister at the new court, where he resided for 14 years. In Feb. 1849, he became British minister at Bern, and in 1851 at Stockholm. In Oct. 1853, he was appointed second in command of the fleet destined to operate in the Black sea, under Admiral Dundas, on whose retirement in Dec. 1854, he succeeded to the chief command. In Sept. 1854, he earned the warmest commendations by the admirable manner in which he covered the landing of the allied forces at Eupatoria. It was owing in a great measure to his arrangements that an army of 57,000 men, with 11,000 horses and 170 guns, was disembarked in the neighborhood of a hostile force of nearly equal strength without the loss of a single man. Having supported the French at the battle of the Alma by bringing his guns to bear upon the Russians, he led the fleet to Balaklava, where he arrived in advance of the army, with which he coöperated vigorously until the close of the war. His most dashing exploit was the useless and hopeless attack upon Fort Constantine, in Oct. 1854, undertaken at the earnest instance of Lord Raglan and Gen. Canrobert, when for several hours his flag ship, the *Agamemnon*, sustained at a distance of 600 yards a terrific fire from several hundred heavy guns in position. He planned

and accompanied the successful expedition into the sea of Azof in May and June, 1855; and during the siege, whenever the opportunity was afforded, he was constantly riding along the lines in front of Sebastopol, and participating with energy in many important military operations. His return to England was the occasion of numerous ovations, and on June 23, 1856, he was called to the house of peers as Baron Lyons of Christchurch. He died as full of honors as of years, universally beloved for his amiability and genial manners. In personal appearance he is said to have borne some resemblance to Nelson.—His elder son, the present peer, RICHARD BICKERTON PEMELL, Baron Lyons, born April 26, 1817, has officiated in various diplomatic capacities in Athens, Dresden, and Florence, and in 1859, on the recall of Lord Napier, was appointed minister to the United States. His younger son, EDMUND MOWBRAY LYONS, an officer of the navy, born June 27, 1819, rose to the rank of commander in 1846, and commanded in the Crimean war H. M. ship *Miranda*, when he received a wound in the night attack on the sea defences of Sebastopol, from which he died 5 days afterward (June 23, 1855) in the hospital of Therapia. Of the 2 daughters of Admiral Lyons, one, Augusta, is married to the duke of Norfolk, and the other, Anne, to Baron Wurtzburg, a Bavarian nobleman.

LYRE (Gr. *λύρα*), one of the most ancient and famous of the family of stringed instruments, the origin of which is lost in antiquity. It was familiar to the Egyptians, as appears from their earliest monuments and records, and also to the nations of western Asia, by whom it was introduced among the Greeks. The latter, however, had a special tradition which attributed its invention to Mercury, who is described by Homer, in his "Hymn to Mercury," as forming a lyre out of the shell of a tortoise which he caught at the entrance of the cavern within which his mother Maia had a few hours previous given birth to him. The following passage in the hymn affords a good description of the ancient lyre:

And through the stone-shelled tortoise's strong skin
At proper distances small holes he made,
And fastened the cut stems of reeds within,
And with a piece of leather overlaid
The open space, and fixed the cubits in,
Fitting the bridge to both, and stretched o'er all
Symphonious chords of sheep-gut rhythmicall.

SHELLIST.

The instrument above described seems, however, to have been identical with that to which the name cithara (*κίθαρα*) was subsequently given, and resembled the modern guitar in having the strings drawn across the sounding bottom. In the lyre of later times they were free on both sides. Concerning the original number of strings there is a variety of opinions; but from the fact that, in the earlier part of the 7th century B.C., Terpander of Antissa added to the instrument 8 new strings, thus constituting it a heptachord, there is reason to believe that the lyre of Mercury could not have had more than 4, although lyres with 3 strings were undoubtedly

used in some parts of Greece. This heptachord, embracing a compass of an octave, was that most commonly used among the Greeks, and subsequently among the Romans, for many ages; although gradually new strings were added and various modifications effected in the shape of the instrument. In Pindar's time lyres were made with 8 strings; Timotheus of Miletus increased the number to 11; and as early as the age of Sappho and Anacreon, a variety of instruments of the lyre species, introduced from Asia Minor, such as the *magadis*, *barbiton*, and others, were in use in Greece, some of which had a compass of 2 octaves and upward of 20 strings. About the time of Pindar the lyre seems to have first become distinct from the cithara, and on account of its fuller and deeper tone was employed in recitations of epic poetry and other compositions of an elevated character. It consisted of a tortoise-shell sounding bottom, from which rose 2 horns (*πηχυς*), the one shaped like the letter S, and the other like the same letter reversed, connected near the top by a transverse piece of wood, to which were fastened the upper ends of the strings, stretched perpendicularly from the bottom. When played, it was placed in an upright position between the knees, while the cithara rested upon the knees, and the sounds were produced by the *plectrum*, or lyre stick of ivory or polished wood, in the hands of the performer, and sometimes by the fingers alone. The Egyptian lyres, constructed on a similar principle, though less elegant in form, were of considerable power, having 5, 7, 10, and 18 strings, and were played in a similar manner. In the Berlin museum is a well preserved one pierced for 18 strings. The lyre, though invented by Mercury, became the peculiar instrument of Apollo, the tutelary god of music and poetry, and was employed to perform the prelude to recitations of epic poetry, and to fill up pauses between the parts. It also gave its name to a species of poetry called lyric, to which it originally furnished an accompaniment.

LYRE BIRD, a large tenuirostral passerine bird, of the family *certhiada* or creepers, and sub-family *menurina* or wrens, according to Gray; and of the family *eriodorida* of Cabanis. Only two species of this singular bird are described, both natives of Australia, constituting the genus *menura* (Davies). The common lyre bird (*M. superba*, Dav.) from the form of the legs has been placed among the gallinaceous tribes, and its name of wood pheasant indicates its general resemblance to these; it has also been ranked with the hornbills among the *conirostræ*, and by others in the neighborhood of the thrushes; but it seems most nearly allied to the wren family. The length is about 43 inches, of which the tail is 25; the bill is rather more than an inch long, resembling that of a peacock, strong, keeled, broad at the base, and of a black color; the nostrils long and narrow, in a fossa near the middle of its length; the wings moderate and rounded; the body about the size of that of a pheasant; tail very long,

and of a singular form, differing in the two sexes; tarsi long and robust, covered with broad scales in front; toes and claws long and strong, fitted for scratching; orbital region naked. The general color above is brownish black, and grayish brown below; the head slightly crested, and the throat rufous; there are 3 kinds of feathers in the tail, which are long and 16 in number; 12 have long slender shafts with delicate filaments more and more distant toward the end; the middle two feathers, longer than the rest, are pointed at the end and barbed only on the inner edge; the external two feathers are broad, growing wider to the ends, and curving outward like an elongated S, the two resembling much the outline of the ancient lyre; the curved part is black with a narrow white border, and pearly beneath with bright rufous spots on the inner web. They are shy, running rapidly among the brush wood, and scratch for slugs, beetles, and insects, generally among the fallen leaves; they fly but little. They live in pairs in rocky places overgrown with bushes; their motions are graceful, the males strutting and displaying the tail feathers like a peacock; the voice is very varied and pleasing, especially in the morning and evening; the nest is made of roots and moss, shaped like a basin and roofed; the eggs are said to be only 2 in number. The second species (*M. Alerti*, Gould) is smaller, with a shorter tail, and with the outer feathers shorter than those succeeding them internally. They represent the rasorial type of the *passeræ*.

LYSANDER, a Spartan commander, killed in battle in 395 B. C. There is no mention of him in history till 407 B. C., when he succeeded Cratesippidas as navarch or commander of the Spartan fleet in the Ægean. Of all the Spartans of that age he was perhaps the best fitted to contend with Alcibiades, who was then in command of the Athenian squadron. Having increased his fleet to 70 ships, by contingents from the insular and Asiatic allies of Sparta, and obtained pecuniary assistance from Cyrus, recently appointed satrap of Ionia, he defeated the Athenian fleet, through the rashness of Antiochus, whom Alcibiades had intrusted with its temporary command, in consequence of which the latter was superseded. Lysander's term of service having expired, he was succeeded in 406 by Callicratidas, who was killed the same year at the battle of Arginusæ. The allies of Sparta then urged the reappointment of Lysander; but as the Lacedæmonian law did not allow the office to be held twice by the same person, he was named vice-admiral, virtually with the chief command, though nominally subordinate to Aracus. He at once proceeded to Ephesus, gathered a powerful fleet, established his personal authority in Miletus, took Cedreæ in Caria and sold its inhabitants into slavery, and carried Lampasæus by storm. The Athenian armament soon arrived, and fixed its station at Ægospotami, on the opposite side of the Hellespont. It consisted of 180 ships,

under the command of 10 generals, none of whom except Conon was qualified for his position. Over against the Athenians in the harbor of Lampsacus lay the Spartan fleet. For 4 successive days the Athenian commanders sailed across the intervening sea, with their ships in battle array, and dared their enemy to come out of his harbor. On the 5th, when the Athenians, grown presumptuous, had beached their triremes, Lysander rowed swiftly across the Hellespont, and captured the entire navy of Athens, with all its seamen, except 8 or 9 galleys that escaped with Conon to Cyprus, and the sacred ship *Paralus* that bore to Athens the intelligence of the disaster. This catastrophe decided the fate of Athens, which surrendered to Lysander early in 404, and also brought to a close the Peloponnesian war. If the glory of having captured Athens belongs to Lysander, the infamy arising from the establishment of the 30 tyrants over her, and from the subjection of many other Hellenic cities to a cruel despotism, is also his. The victories and triumphs achieved by him appear in fact to have disturbed the equilibrium of his mind. A residence in Sparta was no longer tolerable to his soaring pride, nor did he return thither till recalled by the ephori to answer for his misconduct in Asia. After the accession of Agesilaus he was appointed one of the 30 councillors who were to accompany that king in his expedition to the East; but his arrogance soon destroyed whatever influence he may have had with Agesilaus, who, to get rid of him, sent him to superintend affairs in the Hellespontine cities. In 395 B. C. he was placed in command of a military force which was destined to coöperate with the army of Pausanias in reducing the Bœotians and their allies. He entered Bœotia and laid siege to Haliartus, but was surprised by the Thebans under the walls of that city, and slain. It is said that, at the time of his death, he was involved in a conspiracy which had for its object the destruction of the exclusive right of the Heraclidæ to the throne of Sparta. Lysander, though covetous of gold for the advancement of his political and military projects, died poor. He is charged however with having corrupted the aristocracy of his country by the wealth which he brought in.

LYSIAS, an Athenian orator and rhetorician, born in Athens in 458 B. C., died there in 378 B. C. In 443 he emigrated to Thurium in Italy, and there completed his education. After the destruction of the Athenian armament in Sicily, he and 800 others were expelled from Thurium by the partisans of Sparta. He returned to Athens in 411, where he was imprisoned as an enemy of the oligarcha, and, had he not contrived to effect his escape, would probably have been put to death. When Thrasybulus was organizing at Phyle that band of patriots with which he restored liberty to Athens, Lysias, then sojourning at Megara, sent him money, arms, and mercenaries. On the overthrow of the tyranny of the thirty he returned to Athens,

and henceforth chiefly devoted himself to the composition of speeches for parties engaged in litigation, sometimes however pleading in person. There formerly existed over 400 orations that were ascribed to him, but only 280 of these were admitted to be genuine. The number now extant is 85. None delivered by himself, save that against Eratosthenes, have come down to us. The best editions of his remaining works are those of J. Taylor (London, 1739), C. Försch (Leipsic, 1829), and J. Franz (Munich, 1831). There is an English translation of some of the principal orations of Lysias by Dr. Gillies.

LYSIMACHIA, a genus of plants arranged under the natural order of *primulaceæ*. They are of a perennial, herbaceous nature, have entire leaves and axillary or racemed flowers, and the color of the corollas is for the most part yellow. The species belong to the northern portions of Europe and of America. Several are cultivated as garden plants, the most popular of these being the moneywort (*L. nummularia*), with a prostrate, creeping stem, solitary axillary flowers, and ovate acute sepals. The leaves are roundish and opposite to each other. It is a pretty plant for covering rock work, or for the purpose of suspension in a wire basket or some hanging ornamental design from which its pendent stems can droop. There are several species of *lysimachia* in this country, known more familiarly as the loosestrifes. One with a tall stem on which the leaves are arranged in whorls in fours and fives, and with graceful, protruding yellow flowers from their axils, is the *L. quadrifolia* of Linnæus, common in moist or sandy soils. Another, with an erect stem, growing 2 or 3 feet high, with opposite, heart-oval leaves supported upon ciliate footstalks, and with large showy flowers, the *L. ciliata* (Linn.), is the most beautiful. A southern species somewhat similar, but with leaves and flowers not more than half the size, is the *L. radicans* of Hooker; it grows upon swampy river banks in western Virginia and southward. The long-leaved loosestrife (*L. longifolia*, Pursh) is to be found from western New York to Wisconsin. The species are all easy of cultivation, and are pretty garden border flowers; the foreign species are, however, strangely preferred.

LYSIMACHUS, a general of Alexander the Great, and king of Thrace, born in Pella, Macedonia, about 360 B. C., slain in battle in 281 B. C. He was the son of Agathocles, a Thessalian, and was early distinguished for valor, activity, and bodily strength. On the division of the provinces, after the death of Alexander, Thrace and the region bordering on the Danube were allotted to him. The first years of his reign were passed chiefly in wars with the neighboring barbarians, and in the extension and consolidation of his dominions; but in 315 he joined the coalition formed against Antigonus by Ptolemy, Seleucus, and Cassander. In 306 he assumed the title of king. In 303 he invaded Asia Minor, overran Phrygia, and reduced several of the Hellespontine cities. On

the approach of Antigonus, however, he retired into Bithynia, where he was joined by Seleucus, and the two confederates advanced in the spring against Antigonus and his son Demetrius. Of the ensuing campaign we know hardly any thing, except that at the battle of Ipsus, in the summer of 301 (or 300, according to Grote), Lysimachus and Seleucus completely vanquished their antagonists, and shared between them the dominions of Antigonus. Of the territory which accrued to the king of Thrace in consequence of this victory, he retained possession almost until his death, rebuilding the cities in it that had been ruined during the war, and so improving and enlarging New Ilium and the Mysian Alexandria that he came to be regarded as their founder. In 292 he undertook an expedition against the Getæ N. of the lower Danube, which proved unfortunate, himself and his whole army being compelled by famine to surrender to the barbarians. Dromichætes, the Getæan chief, however, merely reprimanded his captive, and restored him to liberty. In 288 he formed a confederacy with Ptolemy, Seleucus, and Pyrrhus against Demetrius Poliorcetes (who had invaded Thrace during his absence and captivity), the result of which was that the latter lost his kingdom of Macedonia, and that Lysimachus presently got possession of it. But a domestic tragedy soon afterward led to his downfall. At the instigation of his queen Arsinoë, daughter of Ptolemy, whom he had recently married, he consented that his son Agathocles should be put to death. This cruel deed so aroused the indignation of his Asian subjects that they rebelled, while Seleucus, his ancient ally, to whose court the widow of Agathocles had fled, levied an army and marched to the aid of the insurgents. Lysimachus hastened across the Hellespont to encounter Seleucus. The hostile monarchs—the two last survivors of the generals of Alexander, and both almost octogenarians—met on the plain of Corus, in Phrygia, and in the battle which ensued Lysimachus was defeated and slain.

LYSIPPUS, a Greek sculptor of Sicyon in the Peloponnesus, flourished in the latter part of the 4th century B. C. He was originally a workman in bronze, and rose to great eminence in his art by the close study of nature. The estimation in which he was held is attested by the well known edict of Alexander the Great, that no one should paint him but Apelles, no one make his statue but Lysippus, and no one represent him on gems but Pyrgoteles. He made statues of Alexander at all periods of his life, and in various positions, and the equestrian statues of 25 Macedonian chieftains who fell at the battle of the Granicus. There is a tradition that the celebrated horses of Venice formed a part of this group. Lysippus probably worked exclusively in bronze, and according to Pliny executed the enormous number of 1,500 pieces of all kinds. Among the most celebrated were several statues of Jupiter, including the colossal one at Tarentum, 60 feet in height; several of Hercules,

one of which is supposed to have been the original from which the "Farnese Hercules" was made by Glycon; the sun drawn in a chariot by 4 horses at Rhodes; "Opportunity," a youth with wings on his ankles, in the act of flying from the earth; and a statue representing a bather scraping himself with a strigil, called Apoxyomenos, which was so admired by the emperor Tiberius that he caused it to be removed from the baths of Agrippa to his own palace. The Roman populace, it is said, were not appeased until the statue was restored to its former place. Lysippus rejected the conventional rules of the older statuaries, and applied himself wholly to the imitation of nature. If he idealized at all, it was on human forms, and his human heroes and demigods and portraits seem to have been his most successful subjects. He departed in various particulars from the proportions observed by his predecessors, giving his figures smaller heads and more slender bodies, whereby he said he made men as they appeared to be, while former artists made them as they were. In the elaboration of individual parts he was unsurpassed, and particularly in the execution of the hair.

LYTHRUM (Gr. *λύθρον*, gore, from the purple color of the flowers), a genus of herbaceous plants belonging to the natural order *lythraceæ*, generally with opposite, entire leaves, no stipules, axillary or whorled flowers; seeds many, without albumen, and enclosed in a two-celled pod. The lythrums are usually called loosestrifes, a name which they share with the *lysimachias*, though very characteristically distinct. The purple loosestrife (*L. salicaria*, Linn.) is a native of Europe, but is to be found in this country in wet meadows; it is a fine, tall, more or less downy plant, with large purple flowers. It is remarked abroad that the color of the flowers varies there from crimson to purple, and that the foliage, though usually smooth and green, becomes hoary and downy if the plant grows in dry places; its stature also is much dwarfed in consequence. It is sometimes cultivated for its beauty, blossoming in midsummer. There are several North American species. The *L. hyssopifolium*, or hyssop-leaved loosestrife, with a low stem 6 or 10 inches high, numerous oblong-linear leaves, and inconspicuous pale purple flowers, is found near salt marshes on the coast of New England. A very fine sort is Hunter's purple loosestrife (*L. Hunteri*, Don), a native of the East Indies, having opposite leaves and flowers of a beautiful red color. The lythrums are easy of cultivation by sowing their seeds, or by division of the roots of the perennial species. The purple loosestrife has an astringent property, which is reputed to have been found useful in inveterate diarrhoeas. A species belonging to Mexico is accounted astringent and vulnerary, a reputation belonging to the genus. The petals of the flowers of *L. Hunteri* are used in India for dyeing. The order of *lythraceæ* contains many plants of decided utility. The crape myrtle (*Lagerstræmia Indica*), a small

shrubby plant with elegant crimped petals of a rosy red color, and much admired, belongs to this order, as also the henna plant of Egypt. (See HENNA.)

LYTTELTON, GEORGE, lord, an English historian, publicist, and miscellaneous writer, born in Hagley, Worcestershire, Jan. 17, 1709, died there, Aug. 22, 1773. He was a member of an old family of considerable property, and was educated at Eton and Oxford, and entered parliament in 1730. In 1737 he was appointed secretary to Frederic, prince of Wales, and in 1744 a lord commissioner of the treasury. In 1754 he was sworn a member of the privy council, in 1755 was made chancellor of the exchequer, and

on Nov. 19, 1757, was elevated to the peerage as Baron Lyttelton of Frankley. The last 10 years of his life were spent chiefly in retirement and literary pursuits. His principal works are: "History of the Life of King Henry II. and of the Age in which he lived" (4 vols. 4to., London, 1767); "Observations on the Conversion and Apostleship of St. Paul" (1747); and "Dialogues on the Dead" (4th ed., 1765).—His son, THOMAS, 2d Baron Lyttelton, was a young man of much ability, and was supposed by some to have been the author of the "Letters of Junius." He brought himself to a premature grave in 1779 by a life of dissipation and profligacy.

LYTTON BULWER. See BULWER LYTTON.

M

M, the 13th letter and the 10th consonant of the English alphabet. The form of the character, like that of the other English letters, is ultimately derived, though with important modifications, from the ancient Phœnician. Its position between L and N is also derived from the ancient Semitic; as in the 119th Psalm, where *Mem* is preceded by *Lamed* and followed by *Nun*. The name *Mem* in Hebrew, like the word *mayim*, probably signified water, the Ethiopic name of the letter, as well as of water, being *mai*. The letter M in English has in all positions one uniform, well known sound, as in *mine*, *camp*, *jam*. It is a liquid or semi-vowel, capable of having its sound protracted indefinitely, in contradistinction from the mutes, whose sounds cannot be thus prolonged. It is a nasal, classing with *n* and *ng*. It is a labial nasal, having the same relation to the labial mutes as *n* to the lingual mutes, and *ng* to the palatal mutes; as in *number*, *tender*, *longer* (as if written *long-ger*). The sound of M is one of the easiest to articulate, and is therefore one of the first uttered by children. It is found in all known languages, and in most of them is a prominent letter in the words for mother (*mam*, *mamma*), as Sansc. *mātā*, Gr. *μήτηρ* (Dor. *μα*), Lat. *mater*, Germ. *Mutter*, Slav. *matka*, Armen. *mair*, Heb. *em*, Chin. *mu*; for nurse, as Germ. *Amme*, Slav. *mamka*; and for breast, as Lat. *mamma*, Gr. *μαμήνη*, Armor. *mamm*. The English sound of M is that which belongs to it also in most of the European languages. In French and Portuguese, however, at the end of a word, and in most cases at the end of a syllable, it loses its sound, and has no other function than to indicate the nasality of the vowel which precedes it. No Greek word terminates with *m*. In Latin, *m* final is the more usual characteristic of the accusative singular. The ancient grammarians ascribed to it in this case a different pronunciation from that which it has elsewhere. The obscurity of this sound, perhaps only indicating the nasality of the vowel, still appears from the fact that in Latin verses *m* final, fol-

lowed by a word beginning with a vowel, does not prevent the elision of the preceding vowel. For the most part, the sound of M has come down unchanged from the earliest times. It is in almost every instance an original sound; as, for instance, Eng. *mete*, Anglo-Sax. *metan*, Mosso-Goth. *mitan*, Lat. *metior*, Gr. *perpetua*, Sans. *ma*, Heb. *madad*, Arab. *medda*. The following are the principal exceptions, made for euphony: 1. In words of Latin origin, *n* assimilates itself to a following *m*, as *immense*, *immerse*, *commute*, for *inmense*, *inmerse*, *conmuta*. So in words from Greek, *n* or a labial sometimes assimilates itself to a following *m*, as *symmetry* for *synmetry*, *lemma* for *lepma*; so also *d*, as *ammunition* for *admunition*. 2. In words both of Latin and Greek origin, *n* sometimes conforms itself to a following labial, by becoming *m*; as *imbibe*, *impend*, *embark*, *combine*, *emblem*, *symbol*, *sympathy*. 3. In words of Teutonic origin, *n* becomes *m* before a labial; as Lat. *cannabis*, Germ. *Hanf*, Eng. *hemp*. Where *m* is now silent, as in the word *mnemonics*, it once doubtless had its appropriate sound.—The Greek and Hebrew M, as a numeral, denoted 40. The Roman M, either as the initial of *mille* or as formed from a diagram composed of two Ds (DD), denotes 1,000; and this is its numerical value in English. It is sometimes used as an abbreviation for English, and more frequently for Latin words of which it is the initial.

MAB, a fairy, celebrated by Shakespeare and other English poets. The name is of uncertain origin, being variously derived from the Midgard of the Eddas, the Habundia or Dame Abonde of Norman fairy lore, and from the Cymric *mab*, a child. According to Voess, Mab was not the fairy queen, the same as Titania, this dignity having been ascribed to her only by mistaking the use of the old English word *queen*, which originally meant only a woman. Queen Mab is mentioned in Shakespeare's "Romeo and Juliet," Ben Jonson's "Satyr," Randolph's pastoral of "Amyntas," Dryden's "Nymphidia," and Milton's "L'Allegro."

MABILLON, JEAN, a French ecclesiastic and author, born at St. Pierre du Mont, in Champagne, Nov. 23, 1682, died in Paris, Dec. 27, 1707. Having joined the Benedictines of St. Maur, he was chosen to assist Dom Jean d'Achery in the compilation of his *Spicilegium Veterum Scriptorum*, and subsequently edited the works of St. Bernard (2 vols. fol., 1690) in the series of the fathers published by his congregation. The ability with which he discharged this task gained him a high reputation, and the minister Colbert offered him a pension of 2,000 livres, which he refused, asking that the royal munificence might rather be shown to his order. In 1683 he was sent to Germany by Louis XIV. to collect documents relating to French history; and the applause with which his *Iter Germanicum*, a narrative of the journey, was received, induced the king to send him to Italy in 1685 to make purchases for the royal library. A result of this tour was his *Museum Italicum* (1687-'9), containing an account of the places which he visited, the rare treasures of some of the libraries, and the ceremonies of the church, beside several learned historical dissertations. While at Rome he examined the catacombs with great care, and, dissatisfied with the honors paid to some of the relics found there, wrote a letter in Latin under the title of "Eusebius of Rome to Theophilus of France, on the Veneration of Unknown Saints," which was examined by the congregation of the Index, and would have been condemned had not the author printed a new edition with alterations. Soon afterward he was selected by his superiors to refute Rancé, abbot of La Trappe, who in a recent work had condemned the custom of permitting monks to study. Mabillon's "Essay on Monastic Studies," which appeared in consequence in 1691, was equally remarkable for sound argument and good temper. His most important other works are: *Vetere Analecta* (4 vols. 8vo., 1675-'85); *De Re Diplomatica* (1681); and *De Liturgia Gallicana* (1685). He edited and published with Ruinart *Acta Sanctorum Ordinis Sancti Benedicti*, commenced by D'Achery, and published the first 4 vols. of the *Annales Ordinis Benedictini* (6 vols., Paris, 1703-'39). A collection of his *Ouvrages posthumes* (3 vols. 4to., Paris) appeared in 1724, and his "Inedited Correspondence with Montfaucon, Magliabecchi, &c.," was edited by M. Valéry (3 vols., Paris, 1847).

MABLY, GABRIEL BONNOT DE, a French ecclesiastic and publicist, born in Grenoble, March 14, 1709, died in Paris, April 23, 1785. His family name was Bonnot. Like his younger brother, the philosopher Condillac, he was destined for the church, and after studying at the seminary of Saint Sulpice in Paris was ordained subdeacon. He showed little liking for theology, and for some time was secretly employed in affairs of state by his relative Cardinal de Tencin, minister of Louis XV., conducting the most difficult negotiations and writing elaborate reports with an ability for which the minister

received all the credit. Quarrelling with his patron, however, he applied himself to literature, and in 1748 published at Geneva his *Droit public de l'Europe*, which achieved a remarkable success. It was followed by *Observations sur les Grecs* (1749); *Observations sur les Romains* (1751); *Entretiens de Phocion* (Amsterdam, 1753); *Observations sur l'histoire de France* (Geneva, 1755); *Principes des négociations* (the Hague, 1757); *De la manière d'écrire l'histoire* (1778); *De la législation* (Amsterdam, 1776); *De l'idée de l'histoire* (1778); and *Principes de morale* (1784). Having been requested by the government of Poland to prepare for them a code of laws, he visited that country in 1771, and published in 1781 a work *Du gouvernement de la Pologne*. He was also consulted by the American congress in 1788 on the preparation of the constitution, and embodied his views in his *Observations sur le gouvernement et les lois des États Unis d'Amérique* (1784).

MABUSE, JAN, a Flemish painter, whose real name was Gossaert, born in Maubeuge, Hainaut, about 1499, died about 1562. Of his early history little is known with certainty. He is said to have studied painting in Italy, after which he practised his art in various cities of the Netherlands, leading at the same time a dissipated and scandalous career. During the reign of Henry VIII. he found his way to England, and painted several of the royal family and many persons of distinction. He was the contemporary and friend of Albert Dürer and Lucas van Leyden. His most celebrated picture, the "Descent from the Cross," perished in the fire which destroyed the cathedral of Middelburg, where it was deposited. The finest of the authenticated works passing under his name is the "Wise Men's Offering," now in the possession of the earl of Carlisle.

MACADAM, JOHN LONDON, the originator of macadamized roads, born in Ayr, Scotland, Sept. 21, 1756, died in Moffat, Dumfriesshire, Nov. 26, 1836. Both his parents came of distinguished Scottish families. On the death of his father in 1770 he was sent to his uncle William Macadam, who came to America attached to the commissariat department of the army which was sent out under the earl of Loudon for the conquest of Canada, and after the peace with France had settled in New York. He placed his nephew in a counting house in that city, of which he subsequently became a successful merchant and prominent citizen. A loyalist from principle, he espoused the cause of his king when the war of the revolution broke out. During its continuance he held the appointment of agent for the sale of prizes at the port of New York, an office in which he made a considerable fortune, the greater portion of which he lost, however, at the peace of 1783, when with the other loyalists of the city he was compelled to abandon America for ever. He returned to Scotland in May of that year, and resided for a brief period at Dumcrieff near Moffat, Dumfriesshire, but soon purchased the estate of Sanchrie in the

county of Ayr. He took a prominent part in the affairs of the county, was in the commission of the peace, a trustee of the roads, and deputy lord lieutenant of the county. At the commencement of the war with France he raised a corps of artillery for the protection of Ayrshire, and received the commission of major from George III. It was in the course of his duties as a magistrate and trustee of roads in Ayrshire that Mr. Macadam's attention was first drawn to the want of scientific principle in the formation of roads. The result of his observation and studies was the elaboration of the system which has received his name. He did not, however, devote himself to bringing his system into practical operation at once, for in 1798 he was sent by the British government to the west of England to regulate and remove abuses in the victualling of the navy in the western ports, in which service he was kept till 1802, when he removed from Falmouth to Bristol. After 1827 he resided at Hoddesdon, Hertfordshire. From 1798 to 1815, when Mr. Macadam was appointed the surveyor-general of the Bristol trust, and first commenced the making of roads upon his own principles, he was engaged during all his leisure in travelling through Great Britain, and investigating the condition of the roads. In this investigation, made as a private individual and at his own expense, he travelled 30,000 miles and spent over 5 years in time and more than £5,000 in money. In 1811 he made a communication to a committee of the house of commons upon the state of the roads of the kingdom, containing the outlines of his system and directions for repairing roads. In Dec. 1815, he was appointed surveyor-general of the trust, or district of roads of Bristol, and in Jan. 1816, commenced carrying his system into operation. He met with the greatest opposition from the farmers, traders, and common people, as well as from the employees of all grades under the old system, which had brought the roads of the trust into so bad a state that most of them were then actually under indictment. So inveterate and so general was this prejudice, and so inimical were the old surveyors to the new system, that Mr. Macadam after a brief period was compelled to call upon his 3 sons, William, James, and London, to act as surveyors, having found that no person not of his own family could be depended upon to carry out the necessary details. After the benefits of the system became palpable, the rapidity of its adoption was remarkable. Within 4 years 700 miles of road in 15 different trusts were made; and within 8 years Mr. Macadam had given his personal attention and his advice and assistance to no fewer than 70 trusts in 28 different counties in Great Britain. In a few years later, out of the 25,600 miles of public roads in the kingdom, nearly seven tenths were macadamized; and at the death of the inventor of the system (1836) it is believed that there were not 250 miles of the whole not macadamized.—A road, according to Mr. Macadam, is an

artificial flooring forming a strong, smooth, solid surface, capable of carrying great weight, and over which carriages may pass without meeting any impediment. To form a true macadamized road the following principles must be fully understood and acted upon: that it is the native soil which really supports the weight of traffic; that while this soil is preserved in a dry state it will carry any weight without sinking, and that it does in fact carry both the road and the carriages; that this native soil must be rendered quite dry by a thorough draining from all under water, and a covering impenetrable to rain must then be placed over it to preserve it in that dry state; that the thickness of a road should only be regulated by the quantity of material necessary to form such impervious covering, and never by any reference to its own power of carrying weight. This covering or roof of the soil must be made of clean dry stone broken into small fragments, each not exceeding 6 ounces in weight, about the size of a pigeon's egg, which must be so prepared and laid as to unite by its own angles into a firm, compact, impenetrable body. This cannot be effected unless the greatest care be taken that no earth, clay, sand, chalk, or other matter that will hold or conduct water be mixed with the broken stone. A road perfectly made on these principles completely excludes water, and therefore never can be affected by the action of frost. The thickness of the stratum of broken stone should never be less than 7 nor more than 10 inches; and the surface should be made nearly flat, never having a greater slope from the centre to the sides than an inch in every 5 feet, which will be ample to carry off all rain. The discovery by Mr. Macadam that angular fragments of hard materials, sufficiently reduced in size, will coalesce or bind into a compacted mass of stone under the pressure of wheels, thus forming a sort of natural mosaic impenetrable to water, and the system of road making based upon it, have been of greater service and benefit to mankind than any other contribution to the science of locomotion except the invention of the steam engine.—Mr. Macadam never demanded nor received any remuneration from the various authorities, committees, and trusts by whom he was consulted, except what was freely tendered; and very many of them never even paid the expenses that they occasioned him. He never would take a contract to make or repair a road himself, nor permit any of his family to do so. He declined all offers made him to leave England and take charge of the public roads of foreign countries, especially an extremely liberal and very complimentary one from the late emperor Nicholas of Russia. In 1825 the British parliament voted Mr. Macadam £4,000 toward repaying his expenses in introducing his system, and an additional sum of £2,000 as a consideration for the benefit the nation had derived from his labors and the free gift of his invention. Even this strikingly inadequate compensation was never wholly paid. He was

at the same time offered knighthood, which he refused. The government subsequently tendered the title to his second son, James (the eldest, William, having previously died), then, and until his own death in 1852, surveyor-general of the metropolitan trust, or road district of London; and it was accepted by him against his father's advice. From this fact, added to his long service in the metropolitan trust, has arisen the erroneous statement, sometimes even made in print, that Sir James Macadam was the originator of the system invented by his father. Mr. Macadam was twice married: first, during his residence in America, to Miss Nicoll of Long island; and in 1827 to Miss De Lancey, eldest daughter of John Peter De Lancey, of Heathcote Hill, Mamaroneck, N. Y., and a sister of the Rt. Rev. William H. De Lancey, present bishop of western New York; a lady of American extraction, but who was born and resided in England.

MACANALLY, DAVID RICE, an American clergyman, born in Grainger co., Tenn., Feb. 17, 1810. He was admitted into the conference of the Methodist Episcopal church as a travelling preacher, at Abingdon, Va., in Dec. 1829. After 12 years of service on circuits and districts, he was called to the presidency of the East Tennessee female institute in Knoxville, in which post he remained 8 years. In 1851 he was appointed editor of the "Christian Advocate" in St. Louis, Mo. He had been since 1840 indirectly connected with the press in North Carolina and Tennessee. He has published various pamphlets and tracts on educational and controversial subjects, and for several years was connected with Horace Mann and others in the endeavor to improve the common school system of the country. He is the author of "Sketches of the Life and Character of Mrs. Ramsey," "Life and Times of William Patton," and "Life and Times of Samuel Patton."

MACAO, a Portuguese city on the coast of China, at the mouth of the Canton river, in lat. 22° 12' 45" N., long. 113° 35' E.; pop. about 60,000, of whom 50,000 are Chinese, and the remainder a mixed multitude of nearly all nations. The city occupies a peninsula on the S. E. side of the island of Heang-shang. A low narrow isthmus about $\frac{1}{4}$ m. wide joins this peninsula to the main island. The Chinese have built a wall across this isthmus, and formerly maintained a guard there to prevent foreigners from passing. The Portuguese territory is 3 m. in length by $\frac{1}{4}$ m. in breadth. The city is built chiefly on the acclivity of two hills around a large semicircular bay. Its white-washed houses make a pretty appearance from the roadstead, but the streets are narrow, and the Chinese population live in miserable and filthy dwellings. The best part of the place consists of a long line of well built houses on the beach, in front of which is a promenade called the Praya Grande. There are 12 Portuguese churches and several convents. The chief public buildings are the senate house, the

governor's palace, and the English factory. On the hills around the city are forts which have an imposing appearance, but are badly armed with worn-out cannon. The principal Portuguese officials are the governor, the judge, and the bishop. There is a college here for the education of Catholic priests, a grammar school in which Portuguese is taught, an English hospital, and several other benevolent institutions. The harbor of Macao has not sufficient depth of water for large vessels, which anchor in the roads E. S. E. of the city and about 5 m. distant. But little shipping is owned in the place, and the trade is carried on almost wholly by Chinese and British merchants. The climate is healthy and temperate, and the city is a favorite resort for invalids from India. Macao was granted to the Portuguese in 1585 by the Chinese emperor, in reward for their services in repelling the incursions of a Japanese pirate. It had, however, been the seat of a factory before that period, and between 1553 and 1561 was the residence of the poet Camoëns, who held a small judicial office there, and wrote a part of the "Lusiad" in a grotto in a garden behind the city. Macao was for a long period the seat of a great trade, not only with China, but with Japan, the Philippine islands, and Indo-China. It dwindled with the decline of the Portuguese power in the East, and is now of little commercial or political importance.

MACAQUE, a name given to several quadrumanous animals intermediate between the long-tailed monkeys and the baboons, constituting the genus *macacus* (Lacép.), characterized by a facial angle of 40° or 45°, elongated muzzle, distinct superciliary ridges, long and large canines, short tail, and rather compact form. The common macaque (*M. cynomolgus*, Lacép.) is olive brown above and grayish white below, with black feet; it inhabits the interior of Africa, and, according to Geoffroy, the island of Java. It has the coloring and the comparatively long tail of the guenons, but the heavy and strong form of the baboons; the general position is on all fours or seated on the ground, taking food either by the hands or immediately by the mouth, filling the ample cheek pouches before swallowing any thing. The wanderer, or lion-tailed monkey (*M. Silenus*, Lacép.), from the Indian archipelago, is black above, with grayish longer hair on the back of the neck and a gray beard; under parts gray; tail with a tuft at the end; it is about as large as a spaniel dog, living in the woods, feeding on roots and leaves, and of harmless disposition. The pig-tailed macaque (*M. rhesus*, Geoffr.), from eastern India, is grayish green above, with short tail, golden yellow nates, and gray extremities. The brown baboon (*M. nemestrinus*, Geoffr.), from Java and Sumatra, is deep brown above, with a black dorsal stripe, tail slender and reaching to the middle of the thigh, and limbs yellowish. The black baboon (*M. niger*, Desm.) has the hair rather woolly, with a crest on the head, the tail a mere tubercle, and the muzzle

elongated. Some of these macaques have been placed in the genus *inuus* (Cuv.), which includes the Barbary ape (*I. sylvanus*, Geoffr.), the tailless species living wild upon the rock of Gibraltar, and the only one found in Europe. This, with the last named species, leads to the *cynocephali* or dog-faced baboons. These monkeys are frequently seen in menageries, and, when taken young, are easily tamed; less active than ordinary monkeys and more powerful, they have not the ferocity and disgusting habits of the baboons. (See APE, and BABOON.)

MACARONI (Ital. *maccheroni*), a peculiar paste or dough prepared from wheat flour and manufactured into tubes or ribbons. It is an Italian invention, and, though made by a simple process, has never been produced with so great success in any other country. The samples from France at the great exhibition of 1851 were nearly equal to those from Italy; the English samples were inferior. The grain grown in the more southern countries of Europe is said to possess a greater amount of gluten, and is therefore better adapted to this manufacture. The wheat, after being washed in the mountain streams, is freed from the husks and ground in water mills, when hot water is added till it is of the consistency of stiff dough. Five different qualities of flour are obtained by an equal number of siftings, the last giving the finest and most delicate that can be made. It is kneaded by means of a wooden pole attached to a post fixed in the ground, and worked up and down as a lever, under one end of which the paste is placed; or by another and less agreeable process of piling up the dough and treading it out with the feet, after which it is rolled with a heavy rolling pin. To reduce the dough to tubes or ribbons, a hollow cylindrical cast iron vessel is used, having the bottom perforated with holes or slits. When this is filled with the paste, a heavy iron plate is driven in by a powerful press, which forces the paste through the holes, and gives it the shape of the perforations, the workman cutting off the pieces of the desired length as they come through. During this process it is partially baked by a fire made under the cylinder. Sometimes the flat pieces are formed into tubes by uniting the edges before they are thoroughly dry. After being hung up for a few days they are ready for use. The largest tubes are called *maccheroni*, the smaller *vermicelli*, and the smallest *fedelini*. Macaroni is prepared for the table by boiling and baking with grated cheese, and is in common with vermicelli and the other varieties much used in the preparation of soups.

MACARONIC POETRY, originally a species of Latin verse, in which words of a modern language furnished with Latin terminations were intermingled; afterward, in general, any verses exhibiting a medley of languages. The invention of macaronics is usually attributed to Teofilo Folengo, called Merlino Coccajo (1491-1544), a learned and witty Benedictine, and friend and contemporary of Sannazzaro. They existed be-

fore him, but he first gave to them poetic excellence. His principal poem, *Macaronia*, a burlesque mixture of Latin, Italian, Tuscan, and plebeian words and forms, satirically narrates the adventures of its hero until he finally arrives in hell. In his *Apologetica* to the work he describes the new species of poetry, deriving the name from macaroni, because, like that mélange of paste, butter, cheese, and spice, it should be coarse and popular. The oldest German macaronic poem is the *Flota, Cortum versale de Flois swartibus, illis Deiriculis, quas omnes fers Minschos, Mannos, Weibras, Jungfras, etc., behuppere et epitzibus suis schnafis stekers d bittere solent. Autore Grifholdo Knicknackis ex Flolandia*, which since 1598 has been often reprinted. Another German macaronic is entitled *De Lusitate Studentica*. Molière gives examples of French macaronic verses in *Le malade imaginaire*; and Rabelais, who often mentions Merlin the cook (Coccaie), employed this style in French prose. It prevailed in England as early as the reign of Henry II., and specimens exist from Walter de Mapes to John Skelton.

MACARTHUR, DUNCAN, an American pioneer and statesman, born in Dutchess co., N. Y., June 14, 1772, died in Ohio in 1840. His family removed in 1780 to the western frontier of Pennsylvania, where he was early inured to the labors and privations of border life. At 18 years of age he left his father's house to seek his fortune in the wilderness, and participated as a ranger or scout in the warfare with the Indians in Kentucky and Ohio, until the victory of Gen. Wayne in 1797 gave peace to the western country. About the commencement of the present century he settled in Ohio as a surveyor, and soon acquired a large landed estate. Subsequently he became a member of the Ohio legislature, and was appointed major-general of the territorial militia. In the war of 1812 he received the commission of brigadier-general in the army, and after serving for two years as second in command succeeded Gen. Harrison in 1814 in command of the army of the West. In the latter part of this year he projected and partly accomplished a bold plan of conquering Upper Canada, which he was obliged to relinquish from a failure of the forces of Gen. Izard to cooperate with him. After the peace, as a joint commissioner with Gen. Cass, he negotiated the treaty with the Indians of Ohio for the sale of their lands in that state, which was ratified in 1818. He subsequently served again in the Ohio legislature, and in 1823-'5 was a representative in congress from that state. In 1830 he was elected governor of Ohio, which position he occupied until 1833. During his term of office he met with an accident which made him a cripple, and the effect of confinement upon one accustomed from youth to an active life so affected his health that reason gave way, and for the last few months of his life he was insane.

MACARTNEY, GEORGE, earl, a British diplomatist, born in Lissanourne, near Belfast, May

14, 1787, died in Chiswick, England, March 31, 1806. He was graduated at Trinity college Dublin, in 1759, and in the same year entered himself as a law student at the Inner Temple, London. In 1764 he was appointed envoy extraordinary to the court of Russia, with which country he succeeded in concluding a commercial treaty. In 1769 he was made chief secretary for Ireland, and distinguished himself in the Irish parliament, to which he had been returned, by his contests with leaders of the patriot party. In 1772 he resigned his Irish secretaryship, and in 1775 became governor of the island of Grenada, which he held till 1779, when, being compelled to surrender that possession to the French, he was sent prisoner to France. Having been exchanged, he returned to England, and was appointed governor of Madras in 1780; but ill health constrained him to resign this office in 1786, and to decline that of governor-general of India to which he had been nominated before his arrival in London. In 1792 he was appointed ambassador extraordinary to the court of Pekin, being the first English envoy ever sent to China. He was next made first British governor of the Cape of Good Hope, but declining health soon obliged him to return to England. In 1776 he was created baron, in 1792 viscount, and in 1794 Earl Macartney in the Irish peerage, while in 1796 he was honored with a British barony. An account of his Chinese embassy, by Sir George Staunton, who had been secretary to him, appeared in London in 1797 (2 vols. 4to.). His life, with selections from his writings, by Sir John Barrow, was published in London in 1807 (2 vols. 4to.).

MACASSAR, or **MANGKASSAR**, a Dutch settlement at the S. extremity of the S. W. peninsula of the island of Celebes in the Malay archipelago, in lat. 5° 7' 45" S., long. 119° 21' 31" E.; pop. about 20,000. The name is also given to a government comprising all the Dutch possessions on the island, with a population of about 520,000. The town is situated about 800 feet from the beach, in a beautiful plain bounded inland by a range of mountains. It has a pier at the end of which there is 15 or 16 feet of water. The streets are wide, regular, and well built, most of the houses being of European construction. One street is set apart for the Chinese. The town is defended by Fort Rotterdam, a work of considerable strength, and surrounded by palisades, with gates which are closed at night. The climate is healthy, and storms are seldom experienced. Beside fisheries of tripang on the N. coast of Australia, and a large native traffic with almost every commercial place in the neighboring waters, Macassar has imports of piece goods, fire-arms, ammunition, cutlery, and woollens from the Netherlands, and nankeens, silks, sugar, tea, porcelain, &c., from China. It exports rice, cloves, nutmegs, sago, cotton wool, tortoise shell, and wax. It was made a free port by the Dutch in 1846. —The name *Macassar* or *Mangassa* is properly that of a people inhabiting the S. part of the

island, and having a language of their own with a written character. They are comparatively civilized, and soon after the first visit of the Portuguese in 1525 became the dominant people of Celebes. They embraced Mohammedanism, which they forced upon the Bugia, the other principal race of the island. In 1669 they were subdued by the Dutch, who had recently driven out the Portuguese. They were themselves expelled by the British in 1810, but Macassar was restored to them with their other possessions in 1816.

MACASSAR, STRAIT OF, a channel connecting the seas of Celebes and Sunda, and separating the island of Celebes from that of Borneo. It is about 350 m. long and from 50 to 140 m. wide, and runs N. and S. During the N. winds of January and February a strong current runs through it toward the S. Its navigation is obstructed by shoals and rocks.

MACAUICO. See **LEMUR.**

MACAULAY, CATHARINE (SAWBIDGE), an English authoress, born in Kent in 1738, died in London in 1791. In 1760 she was married to Dr. George Macaulay, a London physician. She was an ardent republican, and a great admirer of Washington, with whom she corresponded, and whom she visited in 1785. Her principal works are: "History of England from the Accession of James I. to the Revolution" (8 vols. 4to., London, 1763-'71); "Reply to Mr. Burke's Pamphlet, entitled 'Thoughts on the Causes of the Present Discontents'" (London, 1770); "A Modest Plea for the Property of Copyright" (London, 1774); "Address to the People of England, Scotland, and Ireland on the Present Important Crisis of Affairs" (Bath, 1775); "Series of Letters on English History from the Revolution to the Resignation of Walpole" (Bath, 1778); "Treatise on the Immutability of Moral Truth" (London, 1788); and "Observations on the Reflections of E. Burke on the Revolution in France" (London, 1790). Her "History of England" was received with favor on its first appearance, but is now little esteemed.

MACAULAY, THOMAS BABINGTON, baron, an English statesman and historian, born at Rothley Temple, in the village of Rothley, Leicestershire, Oct. 25, 1800, died in Kensington, London, Dec. 28, 1859. His paternal ancestors were Scotch highlanders, and ministers of the kirk. The Rev. John Macaulay was minister of Cardross in Dumbartonshire, and was the father of one daughter, Jean, who married Thomas Babington of Rothley Temple, an English gentleman of ancient family; and of two sons, Aulay Macaulay, who was a scholar of some note, and died vicar of Rothley; and Zachary Macaulay, who became a West India merchant, and was renowned as a philanthropist, and as one of the leaders of "the Clapham sect." Zachary Macaulay married Selina Milla, daughter of a bookseller of Bristol, and the future historian and statesman was born at the residence of his aunt, from whose husband he was named. His education began at home. He then studied

under a Mr. Preston, at Shelford; and at 18 was entered at Trinity college, Cambridge. His university career was brilliant. In 1819 he gained the "chancellor's medal" for a poem on "Pompeii," the same prize in 1820 for a poem on "Evening," and the second Craven scholarship in 1821. He was a leading member of the debating society. He took his bachelor's degree in 1822, and though he did not compete for honors, owing to his distaste for mathematics, he was chosen a fellow of his college. He resided in London and Cambridge alternately during the next 4 years, taking his master's degree in 1825; and he was called to the bar at Lincoln's Inn in 1826. It was during these 4 years that he wrote several of his ballads, "The Spanish Armada," "Moncontour," "Ivry," and others, and also the earliest of his essays and critiques. These writings appeared principally in Knight's "Quarterly Magazine." His first contribution to the "Edinburgh Review" appeared in 1825, the subject being slavery, and his connection with that periodical lasted for 20 years. At that time he wrote poetical political "squibs" for the "London Times," which were attributed to Moore. His first official appointment was that of commissioner of bankrupts, which was obtained for him in the interval between the fall of the Liverpool ministry and the formation of the Wellington ministry. His first public speech was made in 1826, at the annual anti-slavery meeting in London, and its brilliancy confirmed the reputation he had acquired in the debating societies of Cambridge and the metropolis. Much was expected of him by the whig party, to which he belonged; and in 1830 he was brought into parliament by one of the chiefs of that party, the marquis of Lansdowne, for the borough of Calne. He did not disappoint the expectations of his friends. His first speech in the house of commons was made April 5, 1830, in support of the bill to repeal the civil disabilities of the Jews of Great Britain; and his second, Dec. 13, on slavery in the West Indies. During the great debates that marked the course of the reform contest in the commons, Mr. Macaulay took a part second only to that of Mr. E. Stanley (now earl of Derby) in support of liberal principles. Mr. Croker was appointed by the tories to suppress the rising whig, but was worsted in the conflict. He made 8 speeches on reform in the old parliament; and when the elections for the first reformed parliament took place, in 1832, he was returned for the populous and opulent town of Leeds. He spoke several times in 1833, his principal effort being on the East India company's charter bill, July 10, which the experienced speaker (Manners Sutton) pronounced the best speech he ever heard. He was appointed secretary of the board of control in 1833; but he resigned that office, as well as his seat in parliament, in 1834, to go out to India as a member of the supreme council. He was appointed legal adviser to that body; and as the special object of his mission was to prepare a new Indian code, he was exempted from all share in

the administration of affairs. He had 4 assistants, but the code produced was mostly his work. It contained 26 chapters, divided into nearly 500 clauses, and was published in 1838. One of his objects was to do justice to the native populations. The right of appealing from the local courts to the supreme court at the presidency had been enjoyed only by the English; but the new code provided that both natives and Europeans should have the right of appeal, but only to the highest provincial courts. This benevolent attempt drew down upon the codifier the denunciations of the English in India, who called this item of the code "the black act." The code proved a failure, and could not be applied to affairs of real life, because, the author's friends claimed, it was too good. In 1838 Mr. Macaulay returned to England; and in 1839 he was elected to parliament from Edinburgh, and was appointed secretary at war in the Melbourne ministry, with a seat in the cabinet. His first speech on resuming parliamentary life was made June 18, and was in support of the ballot. He spoke on all the leading questions that were discussed during the last two years of the Melbourne ministry; and when that ministry fell, in Aug. 1841, he went into opposition. It has been stated that, as an opposition member, his voice was not often heard; but the statement is incorrect, as he spoke on many occasions during the existence of Sir Robert Peel's second ministry. Among other speeches that he then made were two of peculiar interest to Americans, one being on the treaty of Washington, and the other on the "apprehension of offenders bill," both in 1843. On the return of the whigs to power in 1846 he was made paymaster-general. For his support of the Maynooth grant he incurred the animosity of his constituents, and failed of a reelection at Edinburgh in 1847. In 1840 a collection of his contributions to the "Edinburgh Review" was published at Boston, under the title of "Miscellanies," in 2 vols. 12mo., but omitting several of his best essays. This publication first made him generally known to the reading world. As the fruit of his residence in India, he wrote his articles on "Clive" and "Warren Hastings" for the "Edinburgh Review" in 1840 and 1842. His "Lays of Ancient Rome" were published in 1842, and, in addition to their merit as poetry, the introduction, explanations, and notes show a profound apprehension of the spirit of early Roman history. After the loss of his seat in parliament, he devoted himself to a work on English history, on which he had been some time employed. The first and second volumes of this work appeared at the close of 1848, bearing the title of "The History of England from the Accession of James the Second." These volumes, beside introductory matter, contained the history of England from the accession of James II. to the settlement of the crown on William and Mary (1685-'9), a period of only 4 years; and as the author announced his purpose to bring the history down to a time which was within the memory of per-

sons still living, a very extensive work was anticipated. The "History of England" was received by the world with as much favor and enthusiasm as ever was bestowed upon the most popular of novels. The brilliancy of its style, the range of its authorities, and its liberal tone, made it a favorite wherever a reading public exists. Some of the statements made by the historian led to controversy, as in the case of his charges against William Penn, which is not yet settled. In 1849 he was chosen lord rector of the university of Glasgow, and made his installation speech March 21. The next day, on returning thanks for the tender of the freedom of the city of Glasgow, he spoke again, and took a formal farewell of political life, on which occasion he explained the principles which had governed his course as a statesman. "The path of duty," he said, "appeared to be between two dangerous extremes—extremes which I shall call equally dangerous, seeing that each of them inevitably conducts society to the other. I cannot accuse myself of having ever deviated far toward either. I cannot accuse myself of having ever been untrue either to the cause of civil or religious liberty, or to the cause of property and law. I reflect with pleasure that I bore a part in some of those reforms which corrected great abuses, and removed just discontents. I reflect with equal pleasure that I never stooped to the part of a demagogue, and never feared to confront what seemed to me to be an unreasonable clamor. I never in time of distress incited my countrymen to demand of any government to which I was opposed miracles—that which no government could perform; nor did I seek even the redress of grievances, which it was the duty of a government to redress, by any other than strictly peaceful and legal means." In 1852 he was elected to parliament by the people of Edinburgh without a movement on his part. He neither attended a meeting, nor issued an address, nor expended a farthing. The electors thus acted in order to repair voluntarily the wrong they had done him in 1847. He resumed his place in the house of commons, but the failure of his health did not admit of his participating in debate. His last speech was that which he made at Edinburgh in 1852, on the occasion of his reelection, and that was postponed for several months on account of his illness. At the close of 1855 the 3d and 4th volumes of his "History of England" were published. They carried the work down to the peace of Ryswick in the autumn of 1697, thus covering a period of less than 9 years; and this was not complete, as the details of Scotch affairs for some time were postponed to the 5th volume. The welcome accorded to these volumes was as warm as that which had been bestowed on their predecessors, both in England and in America. His attacks on William Penn were continued in these volumes; and those on Marlborough were much increased in force. The popularity of the new volumes was deserved, for they were in no respect inferior to those

published 7 years earlier, either in their matter or their manner. His remarks on the Scotch highlands gave much offence in the country of his ancestors, and he was accused of dealing too favorably with the conduct of William III. in his narrative of the massacre of Glencoe; and in the summer of 1859 he was formally arraigned, in a series of articles in "Blackwood's Magazine," on the subjects of Marlborough, Glencoe, and the highlands. In 1857 he was chosen a foreign associate member of the French academy of moral and political sciences. In the same year he was created a peer of England, with the title of Baron Macaulay of Rothley. He is supposed to have been somewhat puzzled for a territorial designation, as his life had been passed in towns, and he did not belong to the landed aristocracy; and he took that of Rothley because he was born there, though with that place he had neither feudal nor territorial connection. His promotion was universally approved, and was held to reflect honor on the government of Lord Palmerston. It was supposed that the government wished to avail itself of his knowledge of Indian affairs, the full discussion of which was expected to take place, in consequence of the sepoy mutiny of 1857; but he never took any part in the debates of the peers. Continuing to pursue his historical labors, so far as the state of his health would permit, he died suddenly at his residence, Holly Lodge, Campden Hill, Kensington. The cause of his death was an affection of the heart, and its immediate occasion a fit of coughing. He died in a fainting fit and without pain. He was buried in Westminster abbey. A committee was formed in England (June, 1860) for the purpose of collecting a fund for the erection of his statue in Trinity college, Cambridge. The best edition of his "History" is that of 1858, in 7 volumes, containing his last touches and corrections. Several editions of his "Essays" have been published in England, and of those published in America, that in 5 volumes (Philadelphia, 1852) is the most complete. A full collection of his miscellaneous writings has recently appeared (2 vols., London, 1860).

MACAW, the common name of the large and gorgeous South American parrots of the sub-family *araina*, characterized by a large stout bill, compressed on the sides, with the culmen much arched to the prolonged and acute tip; the lower mandible is deeper than long, and broader at the base than the upper; the wings are long and pointed, with the 2d and 8d quills the longest; the tail lengthened, graduated, and each feather narrowed at the tip; tarsi short and robust, and covered with small scales; toes unequal, the anterior outer rather larger than the posterior outer. This sub-family embraces the genera *ara* (Brisson), *conurus* (Kuhl), and *enicognathus* (Gray), as given in the "Genera of Birds" by the last named author; but as the name macaw is generally given only to the first genus, this article will be restricted to the spe-

cies of *ara*, with which the genus *macrocerus* (Viell.) is synonymous. The macaws are remarkable for their size and the beauty of their plumage; they are confined to the tropical regions of America, where they inhabit the borders of forests, keeping almost entirely in the trees and rarely coming to the ground; they climb about in search of nuts and hard fruits and seeds, which they can readily break with their powerful bills; their food is entirely vegetable, and the tongue is thick and soft; the flight is horizontal, and not elevated. Generally observed in pairs, they sometimes occur in small flocks, which utter the most piercing and disagreeable screams whenever disturbed; they are less docile than the true parrots, and can rarely be taught to articulate more than a few words in a discordant tone; they breed in hollow trees, laying generally 2 eggs, both sexes assisting in incubation; the cheeks are bare of feathers, having only a few minute plumes; the word *ara* is derived from the Indian name of the bird, and is an imitation of their ordinary cry. One of the handsomest species is the scarlet macaw (*A. macao*, Linn.), measuring 39 inches from the bill to the end of the tail; the principal color is bright red, with blue rump, vent, tail coverts, and quills, and greenish blue and yellow wing coverts; the tail, which is about two thirds of the whole length, is variegated with blue and crimson; the upper mandible is whitish, the lower one dusky, and the skin of the cheeks white and wrinkled. This magnificent bird is not uncommon in South America, and is occasionally seen in menageries. The red and blue macaw (*A. aracanga*, Gmel.) greatly resembles the last named species, but the middle of the wing coverts is bright yellow; it attains a length of 39 inches, the tail measuring 24 inches; the prevailing color is vermilion red, the wings variegated with azure blue; the lower back, rump, and tail coverts pale azure and ultramarine blue; the 4 longest central tail feathers vermilion red, the next on each side red and blue, and the rest wholly blue; the under surface of the tail deep red; iris yellow. It is widely distributed in intertropical South America, and even extends to Mexico; like other macaws, it breeds twice a year; from its size and beauty it forms a striking feature in collections, but its harsh notes render it a disagreeable companion in a private house. The blue and yellow macaw (*A. ararauna*, Linn.) is rather smaller and is less common than the two preceding; it is about 2½ feet long, of a fine blue color above, with more or less tinge of green; the lower surface from the breast downward is a light orange yellow; the cheeks are white and the bill black. It frequents woods in marshy districts, where grow the species of palm upon whose fruit it principally feeds; when taken early, it is easily tamed, and may be taught to imitate certain sounds, though not to articulate distinctly; it is easily reconciled to captivity, and has been known to breed in confinement. The green macaw (*A. militaris*,

Linn.) is of a general lively green color, with blackish brown bill, crimson forehead, reddish brown chin, blue lower back, upper tail coverts, wing coverts, and quills; the upper surface of the tail is scarlet with blue tip, the under surface and that of the wings orange yellow; the claws are strong, hooked, and black. It inhabits the warmer parts of the Andean chain, attaining an elevation of 3,000 feet, and is found also in Mexico; it attacks fields of corn and other grain in large flocks, often committing serious depredations; it also feeds upon fruits and fleshy seed vessels; it is docile and easily tamed. These birds were great favorites with the Inca Peruvians, who kept them as pets and ornamented their head dresses with their feathers.

MACBETH, a Scottish chieftain in the 11th century, and the hero of one of Shakespeare's tragedies. The story of Macbeth as given in the tragedy is founded on legends which are widely different from what appears to be the true history as investigated by modern criticism. In reality Macbeth seems to have been the vassal of Thorfinn, a Norwegian prince who had conquered the north of Scotland. King Duncan, in the absence of Thorfinn, invaded the latter's territories, which were defended by Macbeth, who defeated and killed Duncan in a battle near Elgin in 1040. Macbeth was then proclaimed king of Scotland, and reigned for 17 years, till in 1057 Malcolm, the son of Duncan, assisted by an English force under Siward, earl of Northumberland, invaded Scotland and regained his father's throne, after a battle in which Macbeth was killed.

MACCABEES. See ASMONEANS, and HEBREWS.

MACCABEES, BOOKS OF, the collective title of 4 works belonging to the Old Testament Apocrypha, and containing principally the details of the struggles of the Jews against the religious and civil tyranny of the Syrian kings in the heroic period of the Maccabees or Asmonians. The books are connected only by their subjects, written by various authors, and of widely unequal literary merit. The 2 first in order are declared canonical by the councils of Florence and Trent, and are also contained in the original translation of Luther. The 1st book of Maccabees contains a narration of the persecution of the Jews under Antiochus Epiphanes, their revolt under Mattathias and his sons, the death of that old priest, the victories and death of his son Judas Maccabeus, and the wars and death by assassination of the two brothers and successors of the latter, Jonathan and Simon, and concludes with the succession of Simon's son John Hyrcanus. It embraces a period of 40 years (175-135 B. C.). In order of time this is the last of the 4 books. Its narration is lucid and brief, and there is little doubt that it was originally written in Hebrew. The author is unknown, but he is supposed to have lived in Egypt, and to have belonged to the Pharisees. According to Bertholdt, De Wette, and Ewald, he wrote his

work shortly after the death of John Hyrcanus (106). The Greek text of the Septuagint version is the original of all others extant. Jerome says that he saw the original Hebrew. The book is highly valued by the fathers of the church, as well as by Jewish and Christian historians.—The 2d book is superior to the former in the purity and elegance of its language, which is believed to have been originally Greek. It professes to be an abridgment of an earlier historical work by a Jewish writer of Cyrene named Jason, relates the principal events of Jewish history in the reigns of Seleucus IV., Antiochus Epiphanes, and Antiochus Eupator, a period of 15 years, partly covered by the contents of the 1st book, and contains beside some letters which are held by many commentators to be spurious. The historical epitome, which commences with the attempt of one Syrian general Heliodorus to rob the treasury at Jerusalem, and closes with the death of another, Nicanor, contains some valuable additions to other extant authorities on that period. This book is the 2d also in order of time. The precise age of both the author and his predecessor Jason is unknown; the former is supposed to have written about the middle of the 3d century B. C. Luther in his preface to the translation is severe in his judgment on this book, while he regards the 1st as hardly inferior to the histories of the Protestant canonical Scriptures.—A still lower opinion is generally entertained by Protestant theologians, as well as critics, of the contents of the 3d book of Maccabees, the 1st in order of time, which gives an account of a sacreligious attempt of Ptolemy Philopator, after his victory over Antiochus the Great at Raphia (217 B. C.), to enter the holy of holies in the temple of Jerusalem, which was baffled by a miracle, and of a subsequent equally abortive attempt of the same king to have his Jewish subjects crushed by elephants in the hippodrome of Alexandria. The author and his age are unknown, and the book is in no way entitled to rank among the histories of the Maccabean struggle. It was written in Greek; and beside the Latin and other versions, there is also one in Syriac.—The 4th book, the 3d in order of time, contains an amplification of the history of the martyrdom of Eleazar and of the 7 sons of Hannah, the so called Maccabees, whose deaths are also described in the 2d book; it is generally supposed to be the same with the "Supremacy of Reason," attributed to Josephus by Jerome, Eusebius, and others.—Beside these 4 books, there is a 5th extant in Arabic and Syriac, by an unknown author, translated probably from Hebrew, which, like the 2d book, commences with the attempt of Heliodorus, but brings the history of the house of the Asmoneans down to its extermination by Herod the Great. The translators seem to have lived after the destruction of the temple of Jerusalem by Titus. Only the first two books of Maccabees are printed in the Apocrypha of King James's version.

MACCALL, EDWARD R., a captain in the U. S. navy, born in South Carolina, died in Bordentown, N. J., in 1853. He entered the service as a midshipman in Jan. 1808, became a lieutenant in March, 1813, master commandant in March, 1825, and captain in March, 1835. He was 1st lieutenant of the brig *Enterprise* in her engagement with H. B. M. brig *Boxer* upon the coast of Maine, Sept. 14, 1813. When his commanding officer, Lieut. Comdt. Burrows, fell mortally wounded, Lieut. McCall continued the engagement until the *Boxer* surrendered. Both brigs were carried into Portland by him. He received a gold medal from congress "in testimony of his good conduct" on this occasion.

MACCHIAVELLI, NICCOLO, an Italian author and statesman, secretary of the Florentine republic, born in Florence, May 5, 1469, died there, June 22, 1527. His father, Bernardo Macchiavelli, was a lawyer who traced back his ancestry to Hugo, marquis of Tuscany, about the middle of the 9th century; his mother, a woman of talent and a poetess, was descended from the counts of Borgo Nuovo, who flourished in the 10th century. Many of his ancestry on both sides had filled the most important offices in the republic of Florence; of the Macchiavellis 13 had held the post of gonfaloniere of justice, and 53 that of prior. On June 19, 1498, Niccolo entered the service of the state, having been chosen to the office of chancellor of the second chancery of the signiory. In the following month he was appointed secretary to the "ten of liberty and peace," a body of magistrates to whom was intrusted the supreme government. In this office, to which he owes his title of secretary of the Florentine republic, he continued 14 years. The position of Florence at that period was one of great importance, notwithstanding the small size of her territory; and the relations of the republic with the principal powers of Europe were such as required the highest qualities of statesmanship for their proper conduct. Macchiavelli was charged with the political correspondence of the government, both foreign and domestic, and with a wide range of diplomatic functions. He was employed in 23 foreign embassies, among which were 4 to the court of France and 2 to the emperor Maximilian. He was also intrusted with various commissions to the cities dependent on Florence. His first mission was to France in 1500, and his 4th and last to that court was in 1511. In 1502 he was envoy from the republic to Cesare Borgia, duke of Valentino; and in 1507 he was sent ambassador to the emperor. His correspondence with his government during these missions was extensive, and his despatches are models of diplomatic style. They form one of the most instructive and entertaining collections of state papers that have ever been published. The men, the events, and the hopes and fears of the age are depicted with masterly force and clearness, with an animation that never flags, and with remarks always shrewd and judicious. In the internal administration of Flor-

ence, the sagacity and energy of Macchiavelli were as conspicuous as in his diplomatic correspondence. The practice of employing mercenary troops he regarded as one great cause of the weakness of the Italian states; and having studied in all its details the art of war, he exerted himself with ardor to organize a national militia, which for a time acquitted itself successfully in the field. But, distracted by faction and embarrassed by the weakness and vacillation of the chief magistrate Piero Soderini, who had been made gonfaloniere for life, the republic was unable long to contend with her formidable enemies, the pope and the emperor, who had combined to restore the Medici by force of arms. The military and political institutions of the republic were swept away together, and in 1512 the Medici returned in the train of foreign invaders from their long exile. Though his project of a national militia had failed to preserve Florence from her own dissensions and the overwhelming force of her enemies, Macchiavelli clung to it with patriotic tenacity. To vindicate it from some popular objections, and to refute some prevailing errors on the subject of military science, he wrote at this time his work on the "Art of War," which however was not printed till 1521. This treatise is in the form of a dialogue between Cosimo Rucellai, a Florentine gentleman, and Fabrizio Colonna, a Roman nobleman and an officer of distinguished merit in the service of Ferdinand of Spain. It is an able and interesting book, and proposes for Italian imitation the arms and tactics of the Swiss and Spaniards, at that time the best soldiers of Europe. It prefers infantry to cavalry, and fortified camps to fortified towns, and recommends the substitution of rapid movements and decisive engagements for the languid and dilatory operations of the Italian commanders of that day. Its theories attracted so much regard from military men, that to this treatise is attributed the return to sound tactics in the armies of Europe and the subsequent perfection of the art of war. The new government soon began to persecute Macchiavelli, whose ability and reputation made him an object of dread. Three decrees were passed against him within the course of 10 days. By the first two he was deprived of office and condemned to a year's banishment from the city; the third decree mitigated his sentence to a simple prohibition to enter the palace of the signiory. He went into retirement, but the freedom with which he spoke and wrote on public affairs displeased the government; and in the following year he was accused, apparently without reason, of being concerned in an extensive conspiracy just discovered against Cardinal de' Medici, afterward Leo X., and was thrown into prison. He was put to the torture, but confessed nothing. For some time he was kept chained in a dungeon, but soon after the accession of Leo X. to the papacy in 1513 he was included in an amnesty and was liberated. That pope, who possessed great influence in the government of

Florence, and admired Macchiavelli's literary merit, at length began gradually to recall him to public life. He consulted him on various important affairs of state, and invited him to prepare a plan for the government of Florence. In 1521 he sent him on a mission to the Franciscan friars at Carpi. He was next employed to direct the new fortifications of Florence, and subsequently was sent to Venice on a mission of importance. While there he received the welcome tidings that his name had been again inserted in the list of citizens of Florence who were held eligible to office. A brilliant political career now opened before him. He found in Pope Clement VII. a firm friend and protector, and was employed in negotiations where his profound judgment, matured by misfortune, study, and experience, and his unrivalled sagacity and energy, peculiarly qualified him to shine. Disease, however, put a sudden end to his labors. His last employment was in the army of the league against Charles V., after which, returning to Florence, he was seized with violent pains in the stomach, to which he was much subject, and died after having received all the sacraments of the church. His body was interred in Santa Croce, where two centuries afterward an English nobleman, Earl Cowper, erected a monument to his memory. In person Macchiavelli was of ordinary size, of an olive complexion, and an expressive and animated physiognomy. He was simple and lively in conversation, and prompt and piquant in repartee.—Of the writings of Macchiavelli, the most celebrated is the treatise commonly called *Il Principe*, "The Prince," which was written about 1514 and printed in 1532. This work, until recently, was almost universally condemned as designed to teach the vilest arts of despotism, and to present as a model sovereign of an absolute state the perfidious and ferocious Borgia. Scarcely any book of ancient or modern times has been so violently assailed or has excited so much discussion and controversy. The terms in which its author was commonly described, says Macaulay in the "Edinburgh Review," "would seem to import that he was the tempter, the evil principle, the discoverer of ambition and revenge, the original inventor of perjury; that before the publication of his fatal 'Prince' there had never been a hypocrite, a tyrant, or a traitor, a simulated virtue or a convenient crime. One writer gravely assures us that Maurice of Saxony learned all his fraudulent policy from that execrable volume. Another remarks that since it was translated into Turkish the sultans have been more addicted than formerly to the custom of strangling their brothers. Our own foolish Lord Lyttelton charges the poor Florentine with the manifold treasons of the house of Guise and the massacre of St. Bartholomew. Several authors have hinted that the gunpowder plot is to be primarily attributed to his doctrines, and seem to think that his effigy ought to be substituted for that of Guy Fawkes in those processions by which the

ingenuous youth of England annually commemorate the preservation of the three estates. The church of Rome has pronounced his works accursed things. Nor have our own countrymen been backward in testifying their opinion of his merits. Out of his surname they have coined an epithet for a knave, and out of his Christian name a synonyme for the devil." The researches of modern Italian scholars, and a better consideration of the political state of Italy in the 15th century, have at length established the true object of "The Prince," and vindicated in some measure the name of its author from the opprobrium heaped upon it. The work is a scientific account of the art of acquiring and preserving despotic power, and is a calm, unvarnished, and forcible exposition of the means by which tyranny may be established and sustained. If it be a guide to princes desiring to become despots, it is also, as Macchiavelli himself remarked, a guide to the people who wish to destroy tyrants. It weakens despotism by exposing its most subtle secrets. At the same time it exhibits an obliquity of moral principle on the part of its author, so far as political matters are concerned, which can only be palliated by alleging that dissimulation and treachery were universally looked upon in Italy, and indeed throughout Europe in his day, as legitimate political weapons, whose use was creditable to the acuteness and not discreditable to the character of those who were able to wield them with skill and success. Crimes which required for their perpetration self-command, address, quick observation, fertile invention, and profound knowledge of human nature, were regarded with a sort of admiration by nearly all the contemporaries of Macchiavelli. Both his personal character and his works were held in the highest estimation by the most respectable of his countrymen, and in his own day "The Prince" did not affect injuriously his reputation either as a moral man or as a republican. As a statesman his conduct was upright and honorable, and his views of morality, where they differed from those of the persons around him, differed for the better; while his only fault seems to have been that, having adopted some of the maxims then generally received, he arranged them more luminously and expressed them more forcibly than any other writer. About a year after the composition of "The Prince" Macchiavelli wrote "Discourses on the First Decade of Livy," divided into 3 books. The 1st book is devoted to an examination of the domestic government of Rome; the 2d to that of the means by which the power of the republic was extended and preserved without the city; while the 3d passes in review, one by one, particular actions of private individuals, in order to examine their influence upon the progress of power and upon the moral character of the nation. Throughout the whole work he labors to prove that the revolutions of power in every age have depended upon causes which were similar in themselves, although variously

modified by circumstances peculiar to the nation or the period. The work abounds in new and profound ideas supported by clear and powerful reasoning, and has been largely used without acknowledgment by many subsequent historians and political writers. Several years later Macchiavelli began a history of his native republic under the title of "Florentine Histories." This work traces in rapid and animated narrative the revolutions of Italy from the reign of Theodosius to the council of Constance; it then follows in detail the history of Florence from the foundation of the city to the death of Lorenzo the Magnificent in 1492. Like all the writings of the author, this work is remarkable for logical power and for beauty of style. It is said to have had more influence upon Italian prose than any other work except the Decameron of Boccaccio. Beside his prose works, Macchiavelli wrote several poems of no great merit, and 3 or 4 comedies, of which the best is "The Mandragola," which was acted in Florence with the greatest success. "It is the work of a man," says Macaulay, "who, if he had devoted himself to the drama, would probably have attained the highest eminence, and produced a permanent and salutary effect on the national taste."—The fullest and best edition of the works of Macchiavelli was published at Florence in 1813, in 8 vols. 8vo. The "History of Florence," "The Prince," and various historical tracts, are in Bohn's "Standard Library" (1 vol. 12mo., London, 1847). A new edition is now (1860) in progress at Florence. Several of the writings of Macchiavelli were early translated in England (1560–1600).

MACCLESFIELD, a market town and municipal and parliamentary borough of Cheshire, England, 167 m. by railway N. W. from London; pop. in 1851, 39,048. It is pleasantly situated on the river Bollin, and on a declivity near Macclesfield forest. The staple manufacture is silk, which gives employment to about 70 mills. The cotton manufacture is also important. A canal which unites the Grand Trunk and the Peak Forest canals passes near Macclesfield, and opens water communication with most parts of England. The borough returns two members to parliament.

MACCLINTOCK, SIR FRANCIS LEOPOLD, LL.D., a British naval officer and arctic explorer, born in Dundalk, Ireland, in 1819. He entered the navy at the age of 12, and passed his examination in 1838; and after having been stationed for some time at Portsmouth as mate on the Excellent gunnery ship, Capt. Sir Thomas Hastings, he sailed to South America in H. M. steamer Gorgon, Capt. Charles Hotham. For his distinguished conduct in recovering this vessel when stranded near Montevideo he was promoted to a lieutenancy in 1845. During the next 2 years he was with the Pacific squadron, in the Frolic, Capt. Hamilton. Returning to England about the time when anxiety began to be expressed for the safety of Sir John Franklin, he entered heartily into the schemes for

his relief, and accompanied Sir James Ross in one of the 3 arctic expeditions sent out by the admiralty in the spring of 1848. He reached home again in Nov. 1849, after an absence of 19 months, and early in the following year joined another expedition under Capt. H. T. Austin, as first lieutenant of the Assistance, Capt. Ommaney. It was his fortune, in Aug. 1850, to see at Cape Riley the first traces of the missing mariners. (See *ARCTIC DISCOVERY*, vol. ii. p. 57.) In April, 1851, while the ships were fast in the ice in Crozier channel, he made a sledge journey of 80 days along the N. shore of Parry sound, travelling 760 m., and reaching the most westerly point which has yet been attained in the arctic regions. The comparative perfection to which sledge travelling has recently been carried is mainly due to the improvements which he effected. The squadron returned to England in the autumn of the same year, and Lieut. McClintock was at once promoted to the rank of commander. The following spring saw him in command of the *Intrepid*, one of the 5 vessels sent out to the polar regions under Sir Edward Belcher. In accordance with instructions from the admiralty, he sailed, in company with Capt. Kellett, toward Melville island in search of McClure, whom he rescued from a 8 years' imprisonment in the ice; but he was subsequently compelled to abandon his own ship with 8 others of Belcher's fleet, the whole expedition reaching home in Sept. 1854, some in their single remaining vessel and the rest with Capt. Inglefield. McClintock's services were recognized by his promotion to the rank of captain, but he did not obtain active employment until in 1857 Lady Franklin, having resolved to send out a vessel at her own expense for a fresh search, offered him the command of the proposed expedition. The screw steamer *Fox*, of only 177 tons, formerly the pleasure yacht of Sir Richard Sutton, was purchased for £2,000, refitted, and equipped with a crew of 24 volunteers. The total cost was £10,412, all of which was defrayed by Lady Franklin, except £2,981 raised by private subscription. Capt. Allen Young of the merchant service contributed £500, and also acted gratuitously as sailing master. Lieut. (now Commander) W. R. Hobson, Dr. David Walker, and Carl Petersen, interpreter, so favorably known as the companion of Dr. Kane, were the principal other members of the party. The little vessel left Aberdeen on July 1. McClintock's plan was to examine a tract about 300 miles square lying W. of Boothia, and between the northern limits of the explorations of Rae and Anderson and the southern boundaries of those of Sir James Ross, Austin, and Belcher, while to the W. he expected to penetrate as far as the track of Collinson and McClure. (See *ARCTIC DISCOVERY*.) This course would enable him to follow up the clue found by Mr. Anderson, who ascertained in 1855 that a portion of the missing crews had been on Montreal island at the mouth of the Great Fish or Back's river. Having pur-

chased 35 Esquimaux dogs at Disco, on the coast of Greenland, and taken on board two of the natives as drivers, the *Fox* pushed on toward Lancaster sound until on Aug. 17 she was beset in Baffin's bay nearly opposite the entrance to that channel. For 8 months the ice held her fast, but the moving pack meanwhile carried her back upon her course, and when finally released, April 25, 1858, she had drifted 1,395 m. to the southward. McClintock refitted at Holsteinborg, arrived in Lancaster sound, July 12, sailed through Barrow strait, and attempted to pass down Peel sound, between North Somerset and Prince of Wales Land; but having been stopped here by the ice, he passed around North Somerset in the hope of reaching the mouth of the Great Fish river through Bellot strait, which is the water communication between Prince Regent's inlet and the Western sea (now known as Franklin strait), and separates the North American continent from North Somerset. He found the strait obstructed by moving ice, but after much difficulty and danger pushed through it on Sept. 6. A frozen barrier stretched across its western end, and here the *Fox* remained moored for 8 weeks, when she took up her winter quarters at Port Kennedy, on the N. shore of the strait. In the mean time extensive sledge journeys were undertaken; Lieut. Hobson carried out provisions toward the magnetic pole, Capt. Young established a depot on the further side of Franklin strait, and McClintock and Petersen travelled southward in the hope of gathering some information from the natives. On March 1, 1859, McClintock met a party of Esquimaux near Cape Victoria, and learned from them that several years before a ship had been crushed in the ice and sunk in deep water off the N. W. shore of King William's island. Her people went away to a great river, where they all died of starvation, and their bodies were found the next year. It was impossible to obtain any information respecting the number of white men, or the length of time since they left the ships. Another interview with some of the natives in April confirmed these statements, and threw light upon the fate of Franklin's second vessel, which they said drifted ashore at King William's island. The skeleton of one man was found on board. Sending Hobson to search for the wreck, McClintock explored the E. shore of King William's island, and on May 7 came upon a village of Esquimaux, from whom he learned that when the white people marched toward the great river "many of them dropped by the way," and their bodies were found the next winter; some were buried and others were not. Point Ogle, Montreal island at the mouth of Great Fish river, and Barrow inlet were searched, with no better success than the discovery of a few scraps of iron, tin, and copper; and McClintock, having now reached the track of Anderson and Stuart (1855), resolved to follow the S. and W. coasts of King William's island until he met Hobson. The first trace of the long lost crew was found near Cape Herschel,

the W. limit of Simpson's explorations. It was a bleached skeleton lying at full length on the beach; fragments of European clothing, a pocket book, and a few letters were picked up about it. A day's march N. E. of Cape Crozier the party came across a boat fitted to a sledge and apparently prepared for navigating the river. In it were 2 skeletons, 2 loaded guns, and various other relics, including Sir John Franklin's silver plate, beside fuel, ammunition, chocolate, tea, and tobacco. Its head was turned toward the abandoned ships, from whose first position it was about 65 m. distant. A record was also found which had been left here 5 days before by Hobson, who in the mean time had made still more interesting discoveries. After separating from McClintock he had tracked the N. and W. shores of King William's island almost to Cape Herschel. Near Cape Felix, the northernmost point of the island, he found a ruined cairn, 8 tents, and other traces of Franklin's party, but no record; 2 smaller cairns were afterward examined, and on May 6 a large one was observed at Point Victory, where Sir James Ross had touched in 1830. Lying among some stones which had fallen from the top of the structure was a tin case enclosing a record, the first authentic account ever obtained of the history of the lost expedition. It was written on one of the printed forms used in discovery ships for the purpose of being enclosed in bottles and thrown overboard in order to ascertain the direction of the currents. It read as follows:

"28 of May, 1847. H. M. ships Erebus and Terror. Wintered in the ice in lat. 70° 5' N., long. 98° 22' W. Having wintered in 1846-'7 at Beechey island in lat. 74° 48' 28" N., long. 91° 39' 15" W., after having ascended Wellington channel to lat. 77° and returned by the W. side of Cornwallis island. Sir John Franklin commanding the expedition. All well. Party consisting of 3 officers and 6 men left the ships on Monday, 24th May, 1847. Gm. Gore, Lieut.; Chas. F. Des Vaux, Mate."

Around the margin was written in a different hand:

"April 25, 1848.—H. M. ships Terror and Erebus were deserted on the 22d April, 5 leagues N. N. W. of this, having been beset since 13th Sept. 1846. The officers and crews, consisting of 106 souls, under the command of Captain F. R. M. Crozier, landed here—in lat. 69° 37' 42", long. 98° 4' 15". This paper was found by Lt. Irving under the cairn supposed to have been built by Sir James Ross in 1831, 4 miles to the northward, where it had been deposited by the late Commander Gore in June, 1847. Sir James Ross's pillar has not however been found, and the paper has been transferred to this position, which is that in which Sir J. Ross's pillar was erected. Sir John Franklin died on the 11th June, 1847, and the total loss by deaths in the expedition has been to this date 9 officers and 15 men." JAMES FITZJAMES, Captain F. R. M. Crozier, H. M. S. Erebus.

Captain and senior off'r.
and start on to-morrow, 26th,
for Back's Fish river."

The date 1846-'7 given as that of Franklin's wintering at Beechey island is evidently an error; it should be 1845-'6. Vast quantities of clothing and other articles were found here. The wreck was not seen, nor were any more skeletons found; but this indeed was hardly to be expected, as the route toward the Great Fish

river was almost all the way over ice which breaks up in summer. Meeting no more of the Esquimaux nor further traces of the lost voyagers, and feeling certain that the whole expedition had perished, McClintock returned to his vessel, June 19, carrying a great number of relics, many of which had been purchased from the natives. Beside solving the problem which had engaged arctic enterprise for 11 years, his expedition had completed the delineation of the N. shore of the American continent; laid down the previously unknown outline of Boothia Felix and the coast of King William's island; proved the navigability of Bellot strait, the existence of which was before doubted; opened a new and capacious channel extending N. W. from Victoria strait to Parry or Melville sound, and since named at the suggestion of Lady Franklin McClintock channel; observed many interesting facts in terrestrial magnetism; and finally, proved Sir John Franklin to be the discoverer of the north-west passage. With the aid of McClintock's narrative we are now able to trace out Franklin's last voyage. During the first season it was unusually prosperous. Passing up Lancaster sound, he explored Wellington channel (then an unknown sea) to a point further N. than was reached by either Penny, De Haven, or Belcher; sailed around Cornwallis island, and wintered at Beechey island. In the spring and summer of 1846 he either navigated Bellot strait, or more probably pushed through Peel sound, reaching Victoria strait, where he was finally beset in September, and thus supplied the only link wanting to complete a chain of water communication between the two oceans. The skeletons found in the boat near Cape Crozier show that after the abandonment of the Erebus and Terror a party attempted to return, for what purpose can only be conjectured.—The Fox found herself free from ice on Aug. 9, and immediately made sail for home, reaching the Isle of Wight Sept. 20. Capt. McClintock was received with great distinction. The university of Dublin conferred upon him the degree of LL.D., the corporation of London voted him the freedom of the city, her majesty granted him the full pay of captain in the navy for the two years he was absent, and Lady Franklin presented to him the vessel in which he had made his memorable voyage. He was knighted Feb. 23, 1860, and in the spring of the same year was appointed by the government to survey a deep sea route for a proposed North Atlantic telegraph. His "Narrative of the Discovery of the Fate of Sir John Franklin and his Companions" appeared in London and Boston (U. S.) in 1860.—See also "The Search for Sir John Franklin," in the "Cornhill Magazine," No. I., Jan. 1860 (by Capt. Allen Young).

MACCLINTOCK, JOHN, D.D., an American clergyman, born in Philadelphia in 1814. He was graduated at the university of Pennsylvania in 1835, entered the Methodist ministry, and became a member of the New Jersey conference.

* These figures make the original force of Franklin's expedition 129, whereas it has commonly been stated at 138. It has been ascertained, however, that only 134 actually left England, and 5 of these subsequently returned.

After being in the pastoral office a short time, he was elected professor of mathematics in Dickinson college, Carlisle, Penn., and was transferred in 1839 to the chair of ancient languages. During his residence at Carlisle he translated in company with Prof. Blumenthal Neander's "Life of Christ," and began with Prof. Crooks a series of Latin and Greek text books, comprising "Elementary Greek Grammar," "First and Second Books in Greek," "First and Second Books in Latin," and "Introduction to Latin Style." In 1848 he was elected to the editorship of the "Methodist Quarterly Review," which office he filled until 1856, when he was appointed by the general conference, in connection with Bishop Simpson, a delegate to represent the Methodist Episcopal church in the English, Irish, French, and German conferences. He was also present as a delegate from that church to the world's convention held in Berlin during the same year. After his return he was elected president of the Troy university. In the interim of the organization of the college classes he was pastor of St. Paul's church, New York. In June, 1860, he sailed for Paris, to take charge of the American chapel there, under the auspices of the American and foreign Christian union. For several years past, in connection with Dr. Strong of the Troy university, he has been preparing a "Biblical and Theological Dictionary." He has also published "Analysis of Watson's Theological Institutes," "Temporal Power of the Pope," and "Sketches of Eminent Methodist Ministers."

MACCLURE, SIR ROBERT JOHN LE MESURIER, a British navigator, born in Wexford, Ireland, Jan. 28, 1807. He was the posthumous child of Capt. McClure, a British officer killed at the battle of Aboukir, and at the age of 4 was adopted by his baptismal sponsor, Gen. Le Mesurier, a friend of his father and a man of large fortune. He was educated at Eton, and, being destined for the army, was subsequently sent to the military college at Sandhurst, whence he deserted with 3 companions and went to France. Gen. Le Mesurier, finding him averse to a military career, then procured him a midshipman's appointment. After serving for 10 years on various stations, he accompanied Sir George Back in 1836 on his second expedition to the arctic regions as mate of the *Terror*, which subsequently formed part of Sir John Franklin's last expedition. Returning to England in Sept. 1837, he was promoted to a lieutenancy, and was variously employed until 1848, when he accompanied Sir James Ross on his voyage in search of Sir John Franklin. In Jan. 1850, he sailed from Plymouth in command of the *Investigator*, accompanied by the *Enterprise*, Capt. Collinson, the senior officer of the expedition, under orders to pass through Behring's straits, and thence if practicable proceed to Melville island, an achievement which had not then been accomplished by any vessel. The vessels, which were provisioned for 8 years and had each a complement of 66 men, were parted

by a gale in the straits of Magellan, and never afterward met; but McClure pressed on with the *Investigator*, and in July reached Behring's straits, where he met the *Herald*, Capt. Kellett, with which he had orders to communicate. Capt. Kellett, deeming it hazardous for a single vessel to proceed further eastward, as the senior officer on the station ordered McClure to return; but the latter, taking the responsibility upon himself, determined to push on, and when last seen, on Aug. 4, was bearing into the heart of the polar pack. For nearly 8 years from that date he and his companions remained buried from the world, and held communication with no civilized beings but themselves. Following the coast of the mainland as far as Cape Parry, the *Investigator* thence bore to the N. E., and on Sept. 6 land was discovered in lat. 71° 6' N., long. 123° W., which McClure, finding it an unexplored portion of Banks's Land discovered by Parry in 1820, subsequently named Baring's Land. Divided from it by a strait was another tract, which he called Prince Albert's Land. Proceeding still in a N. E. direction up this strait, to which he gave the name of Prince of Wales strait, he arrived on the 16th in lat. 73° 10' N., long. 117° 10' W., within 30 miles of that series of straits which, under the names of Melville, Barrow, and Lancaster, communicate with Baffin's bay. At this moment, when the long mooted problem of the existence of a N. W. passage seemed about to be solved, the ice pack in Melville strait was closed upon the intrepid navigators, and their further progress to the N. E. was cut off for that season. Securing the ship, after a perilous drift to the southward, in permanent quarters for the winter, McClure started on Oct. 21 with a sledge party to the northward to reach Barrow strait, and complete the discovery which he had almost accomplished in the *Investigator*. On the morning of the 26th they reached a hill on the eastern extremity of Banks's Land, opposite to Cape Hay in Melville island, from the summit of which as the sun rose was seen far to the north, and across the entrance of Prince of Wales strait, the frozen water of Melville strait. The existence of a water communication around the N. coast of America being thus demonstrated, McClure returned on Oct. 31 to the *Investigator*, narrowly escaping death from exposure and cold on the way. The winter of 1850-'51 was occupied with fruitless searches by exploring parties for traces of Sir John Franklin; and in the latter part of July, 1851, the ship once more began to move to the N. E. Again she was drifted within 25 miles of Melville strait; but finding the barrier of ice still impassable, McClure reluctantly altered his course, and proceeded around the southerly and westerly side of Banks's Land, in the hope of reaching Melville island from that direction. The voyage was attended with unusual perils, and escapes which seemed little less than miraculous; but on Sept. 24 the ship was finally brought in safety to an inlet on the N. W. side

of Banks's Land, in lat. 74° 6' N., long. 117° 54' W., near the point from which McClure in the previous October had discovered the N.W. passage, and which he appropriately named the bay of Mercy. Here the ship was almost immediately frozen in, having Melville island opposite, and the wide expanse of water variously called Melville strait, Melville sound, Parry sound, and Barrow strait, to the N. and E. This was the second discovery of a N. W. passage, the connecting link of water between Melville strait and the Arctic sea W. of it being nearly due W. of Lancaster sound. A party from the Investigator crossed the ice to Melville island in April, 1852, and left there a document describing the previous operations of McClure and his position at the bay of Mercy. The ship, however, remained fast fixed in the ice, which did not break up during that summer, and the winter of 1852-'3 was passed in the same place. Provisions meanwhile became scarce, notwithstanding that the crew killed and cured many thousand pounds of venison and other food; and in March, 1853, the health of the men was so greatly impaired that McClure determined to send part of them to England *via* the Mackenzie river and the Hudson's Bay territory, and to stay by the ship with the remainder until the spring of 1854, when, if no succor arrived, he was to proceed to Melville island and thence to Beechey island, with the hope of there finding the means of conveyance home. Fortunately for him, at this juncture Capt. Kellett of the Resolute, who had some time previously arrived at Melville island, found McClure's document, and despatched Lient. Pim to the bay of Mercy. The crew of the Investigator crossed over to the Resolute's quarters soon after, and on June 8, 1853, the former ship was abandoned by her commander, it being deemed, under the circumstances in which she was placed, impossible to save her. McClure remained with the Resolute during the ensuing summer and winter, and in April, 1854, departed with his crew in sledges to Beechey island, whither he was followed in May by Kellett, who by the orders of his superior, Sir Edward Belcher, had abandoned his ship. Finally, in the summer of 1854, the whole party, together with the crews of the Intrepid, Assistance, and Pioneer, which had also been deserted by order of Sir Edward Belcher, their commanding officer, were transported safely to England, arriving there Sept. 28, the Investigator's crew being the first which had ever entered Behring's straits and reached Europe by Baffin's bay. McClure received the £5,000 offered for the discovery of a N. W. passage, and a similar sum was distributed among the officers and crew. In 1855 he received the honor of knighthood. He has since been employed on the China station.

MACCOLURG, JAMES, an American physician, born in Hampton, Va., in 1747, died in Richmond in July, 1825. He was a fellow student with Jefferson at the college of William and Mary, and was educated for the medical profes-

sion in Edinburgh and Paris. In London he published an essay on the "Human Bile," which was translated into the principal languages of Europe. Returning to America in 1773, he settled in Williamsburg, Va., whence in 1788 he removed to Hampton, where he resided until his death, which occurred in consequence of his horses running away. He wrote with ability and in a pure and elegant style on medical subjects, and occasionally produced *vers de société* of genuine merit.

MACCONNEL, JOHN L., an American author, born in Illinois, Nov. 11, 1826. He began the study of law under his father, and was graduated at the law school of Transylvania university, in Lexington, Ky. When the Mexican war broke out he entered the regiment of Col. Harding, June 6, 1846, as a volunteer private. He was soon made first lieutenant of his company, and was promoted to a captaincy after the battle of Buena Vista, where he was twice wounded. After the war he returned home and recommenced the practice of law at Jacksonville, where he has since resided. As a writer he is chiefly known by works of fiction, or sketches setting forth western American life and incident. Among these are: "Talbot and Vernon" (New York, 1850); "Grahame, or Youth and Manhood" (1850); "The Glenns" (1851); and "Western Characters" (1854).

MACCORD, DAVID J., an American lawyer and author, born in St. Matthew's parish, S. C., in Jan. 1797, died in Columbia, May 12, 1855. He was graduated at the South Carolina college, was admitted to the bar in 1818, and becoming associated with Henry J. Nott, edited with him the decisions of the constitutional court of South Carolina from 1818 to 1820, and alone from 1821 to 1823. In 1822 he became the law partner of William C. Preston. In 1824 he was elected state reporter, and he reported the decisions both of the court of appeals and of equity from 1825 to 1827. In 1825 he was made intendant (mayor) of the town of Columbia, where he welcomed Lafayette on his visit. Between 1828 and 1830 he travelled in Europe, and witnessed the revolution in Paris. He returned to Carolina during the period of nullification, entered the state legislature, and was one of the most active of those who sustained the state veto. As a trustee of the South Carolina college, he was intimate with Dr. Thomas Cooper, of whom he has left interesting reminiscences. He retired from the bar in 1836, became president of the state bank at Columbia, and in connection with Col. Blanding he started the "South Carolina Law Journal," which was not long continued. In 1839 he was appointed compiler and editor of the "Statutes at Large of South Carolina," a work which had been originally begun by Dr. Cooper. For many years a member of the legislature, McCord was long the chairman of the important committee on federal relations. He also exerted himself efficiently for the improvement of the judiciary system. In 1840 he married his second wife, a

daughter of Langdon Cheves, and from that year devoted himself successfully to agricultural pursuits as a cotton planter, relieving the monotony of this mode of life by books and authorship. His favorite topics were politics and political economy, on which he wrote many papers for both series of the "Southern Review." He also contributed to "De Bow's Review."—LOUISA S. (CHEVES), wife of the preceding, an American authoress, born in South Carolina in 1810. Soon after her marriage in 1840, she removed with her husband to their plantation at Fort Motte on the Congaree, a site famous in revolutionary annals. Her first published volume, entitled "My Dreams" (Philadelphia, 1848), had been the gradual accumulation of many previous years. In the same year she translated from the French Bastiat's "Sophisms of the Protective Policy" (New York, 1848). In 1851 she produced her tragedy of "Caius Gracchus," and she has contributed at intervals to the "Southern Review," "De Bow's Review," and the "Southern Literary Messenger." Her articles show a remarkable knowledge of facts and arguments on subjects not usually included in the studies of women.

MACCOSH, JAMES, LL.D., a Scottish clergyman, born about 1810. He was settled at Brechin, a parish in Forfarshire, until the year 1853, when he accepted the chair of logic and metaphysics in the Queen's university at Belfast, Ireland. In 1850 he published a work on the "Method of Divine Government, Physical and Moral," which attracted much attention, and has been widely circulated both in Great Britain and America. An essay in the "North British Review" for Aug. 1851, on "Typical Forms," led to the publication in 1856, in conjunction with Dr. Dickie of the Queen's university, of "Typical Forms and Special Ends in Creation." His last published work is entitled "Intuitions of the Mind Inductively Investigated" (London and New York, 1860). In this, as in his previous publications, he diverges from the English school of Locke by maintaining the existence and essential importance of *a priori* conceptions and beliefs. They are the conditions of all empirical and concrete knowledge, and without them ethics, theology, and all the sciences are impossible. But by investigating these intuitions inductively, he claims that he departs from the method and avoids the results of the German transcendental school. Shunning the two extremes of sensationalism and idealism, it is his aim to grasp and unite the truth in each. In this spirit he treats the topics which lie at the foundation of knowledge and faith, as time, space, quantity, power, identity, causation, substance, being, the infinite, personality, freedom, and moral obligation.

MACCRACKEN, a W. co. of Ky., separated from Ill. by the Ohio river; area, 232 sq. m.; pop. in 1850, 6,967, of whom 808 were slaves. The Tennessee river forms its N. E. boundary, and it is drained by the Clark river and its branches. The surface is level and the soil fer-

tile. The productions in 1850 were 174,976 bushels of maize, 18,888 of oats, 84,196 lbs. of tobacco, and 2,743 of wool. There were 8 grist mills, 3 saw mills, 1 tannery, 15 churches, and 648 pupils attending schools. Capital, Paducah.

MACOREA, JANE, an American woman, killed near Fort Edward, Washington co., N. Y., July 27, 1777. She was the daughter of a Scotch Presbyterian clergyman settled in New Jersey, after whose death she went to live with a brother on the Hudson river in the neighborhood of Fort Edward. At the commencement of the American revolution, being then a lovely young girl, she was betrothed to a young man named David Jones, who, adhering to the crown, went to Canada and was commissioned a lieutenant in a loyalist regiment. The approach of Burgoyne's army from the north in the summer of 1777 having spread consternation through the neighboring country, Miss McCrea's brother, who was a whig, prepared to remove to a place of safety, and sent for his sister, then on a visit to a Mrs. McNeil, residing at Fort Edward. Miss McCrea, supposing that her lover, with whom she probably corresponded, was in the invading army, lingered day after day at Mrs. McNeil's, with the hope of having an interview with him. The summons of her brother having at last become peremptory, she prepared reluctantly to embark in a bateau which was to convey several families down the Hudson out of reach of danger. On the morning fixed upon for her departure the house was suddenly surprised by a party of hostile Indians belonging to Burgoyne's army, and sent out by him to scour the country and harass the Americans; Mrs. McNeil and herself were made prisoners, and with other members of the family were hurried off to Burgoyne's camp. Mrs. McNeil arrived there in safety, and half an hour afterward another party of Indians came in with freshly severed scalps, on one of which she recognized the long glossy hair of Jane McCrea. The precise manner of her death has never been ascertained. The Indians stated that she was killed by a random shot from a detachment of Americans sent out in pursuit; whereupon her captors, being cut off from the reward offered for prisoners, secured her scalp and left her body by the wayside. Another story is that a quarrel arose among the Indians as to whose prize she was, in the midst of which one of them in a paroxysm of rage tomahawked her on the spot. The event caused a general feeling of horror through the country, and even in Europe, and Burke used the story with powerful effect in the British house of commons. An acrimonious correspondence ensued between Gates and Burgoyne; but the latter, who professed to be as much shocked as any one at the tragedy, denied peremptorily that the Indians were allowed to perpetrate such excesses with impunity. He immediately summoned a council of Indian chiefs, and demanded that the murderer should be given up; but it having been represented to him that his Indian allies

would in that event probably desert him, he was persuaded to let the offender go unpunished. The story has been related in various ways, and under the hands of successive narrators has been expanded into a pathetic love romance. It was said that Lieut. Jones hired the Indians to bring his mistress to the camp; and that they murdered her on the way to settle a dispute respecting the reward offered. This, however, he always denied. He retired to Canada soon after, and lived to be an old man, but was to the close of his life melancholy and taciturn. A blasted pine tree marks the spot where, tradition relates, Jane McCrea was killed, and her grave may be seen in a small cemetery near the ruins of Fort Edward.

MACCRIE, THOMAS, D.D., a Scottish preacher and author, born in Dunse in Nov. 1772, died in Edinburgh, Aug. 5, 1835. He was educated at the university of Edinburgh, and in 1795 was licensed as a preacher by the Antiburgher associate presbytery of Kelso. In the controversies which agitated the Scottish church at the close of the last century he took an active part as an opponent of the voluntary principle in ecclesiastical polity, and was in consequence, with other ministers, deposed from office in 1806. This act led to the formation of the constitutional associate presbytery, of which he became a prominent member. His attention having been drawn during the progress of the controversy to the history of the Scottish reformation and the labors of the Scottish reformers, he undertook a "Life of John Knox," which after 4 years of preparation was published in 1811, and raised the author to a prominent place among contemporary writers. A 2d edition appeared in 1818, so greatly amplified and improved as to form almost a new work. His next literary undertaking was an elaborate review of Scott's "Old Mortality," published in the first 3 numbers of the "Christian Instructor" for 1817, in which he defended the Covenanters from the aspersions of the Scottish novelist. In 1819 appeared his "Life of Andrew Melville," giving an account of the formation of the Scottish kirk; in 1827 his "History of the Progress and Suppression of the Reformation in Italy;" and in 1829 "The Progress and Suppression of the Reformation in Spain in the Sixteenth Century." In the preparation of the last two works he mastered the Italian and Spanish languages, that he might consult original authorities. In 1829 he exerted himself against Roman Catholic emancipation, and several years later he took an active part in the "anti-patronage" controversy. At the time of his death he was engaged upon a "Life of Calvin." In addition to the works mentioned, he was the author of various collections of lectures and sermons, of a series of lives of Scottish divines of the period of the reformation contributed to the "Christian Magazine," and of other writings. A uniform edition of his work has been edited by his son, Prof. McCrie (4 vols., Edinburgh, 1856).

MACCULLOCH, JOHN, a British physician and author, born in the island of Guernsey, Oct. 6, 1773, died in Penzance, Cornwall, Aug. 21, 1835. In 1790 he went to Edinburgh to prosecute his medical studies, and took his degree of M.D. at the age of 18. He subsequently entered the army as assistant surgeon, and in 1803 was appointed chemist to the board of ordnance. In 1807 he settled at Blackheath, and commenced practice as a physician, but in 1811 abandoned his profession, on being engaged by government to make various scientific surveys in Scotland. His most important publications are: "A Description of the Western Islands of Scotland" (2 vols. 8vo., London, 1819); "A Geological Classification of Rocks" (1821); "The Highlands and Western Islands of Scotland" (4 vols. 8vo., 1824); and "Proofs and Illustrations of the Attributes of God from the Facts and Laws of the Physical Universe" (3 vols. 8vo., 1837).

MACCULLOCH, JOHN RAMSAY, a Scottish political economist, born in Wigton in 1789. His first literary essays were contributed to "The Scotsman," an Edinburgh newspaper, of which he afterward became editor. In 1828 he was appointed to fill the chair of political economy in the university of London, and officiated in this capacity until 1832. He has been also, for many years, a regular contributor to the "Edinburgh Review," and has received from government for his services to literature a pension of £200, and the comptrollership of the stationery office. His principal works are: "Principles of Political Economy;" "Treatise on the Principles and Practical Influence of Taxation and the Funding System;" "Statistical Account of the British Empire;" "Dictionary, Practical, Theoretical, and Historical, of Commerce and Commercial Navigation;" and "Dictionary, Geographical, Statistical, and Historical, of the various Countries, Places, and principal Natural Objects in the World." All these works have passed through several editions.

MACDIARMID, JOHN, a Scottish author, born in Weem, Perthshire, in 1779, died in London, April 7, 1808. He was educated at the universities of Edinburgh and St. Andrew's, and in 1801 established himself in London, where he commenced his literary career as editor of the "St. James's Chronicle." Upon the breaking out of the war with France in 1802, he examined into the system of national defence adopted, and in 1805 published an elaborate work entitled "An Inquiry into the System of Military Defence of Great Britain" (2 vols. 8vo.), in which he undertook to show that a regular army in the event of an invasion is superior to volunteers. This work was followed by "An Inquiry into the Principles of Civil and Military Subordination" (8vo., 1804). Although emaciated and physically weakened by incessant devotion to literary labors, he entered with ardor upon a new plan of political biographies, and in 1807 produced his "Lives of British

Statesmen" (4to.), beginning with Sir Thomas More, a work characterized by Disraeli as perspicuous and unaffected in style, and as containing a variety of new and curious information on important subjects. Maodiamid was prostrated by a paralytic stroke in Nov. 1807, and was prematurely carried off by a second attack.—JOHN, a Scottish miscellaneous author, born in Edinburgh about 1789, died in Dumfries, Nov. 12, 1852. He was educated at the university of Edinburgh, and afterward obtained a clerkship in a bank, devoting his leisure hours to literary pursuits. He became a contributor to the "Scots' Magazine," and in 1817 editor of the "Dumfries Courier." The most important of his works are: "History of Dumfries;" "Life of Cowper;" "Life of William Nicholson, the Galloway Poet;" "Sketches from Nature;" and "The Scrap Book."

MACDONALD, a S. W. co. of Mo., bordered on the S. by Ark. and on the W. by the Indian territory; area, 475 sq. m.; pop. in 1856, 3,533, of whom 51 were slaves. It is drained by various tributaries of the Neosho river. The surface is undulating and the soil fertile. The productions in 1850 were 145,659 bushels of Indian corn, 7,870 of oats, 7,839 of wheat, and 4,841 lbs. of wool. There were 5 churches, and 218 pupils attending public schools. Capital, Rutledge.

MACDONALD, ÉTIENNE JACQUES JOSEPH ALEXANDRE, duke of Taranto, a marshal of France, born in Sancerre, Nov. 17, 1766, died at his chateau near Guise, Sept. 24, 1840. He was descended from a Scottish family, which, following the fortunes of the Stuarts, emigrated to France, and there fixed their residence. Entering the army in 1784, he served in the campaigns of Holland and the Rhine in 1793-'7, and for his participation in the passage of the Waal on the ice, under a heavy fire from the enemy in 1795, he was made a general of division. In 1798 he was appointed governor of the Papal States, and defeated a large Neapolitan army under Gen. Mack at Otricoli. The disasters sustained by the French generals in northern Italy in the beginning of 1799 having rendered the evacuation of Naples indispensable, Macdonald retreated toward Lucca; and being joined in June by several additional corps, he attacked the combined army of Austrians and Russians under Suwaroff on the banks of the Trebia on the 17th of the month. After an obstinate contest of 8 days, in which each side suffered a loss of 12,000 men, Macdonald, learning that the allies were expecting large reinforcements, retired by a circuitous march to Genoa. Compelled by ill health to return to Paris, he rendered important assistance to Napoleon on the 18th Brumaire, in return for which he was appointed to command the army of the Grisons. With this force in the winter of 1800-'1 he accomplished the celebrated passage of the Splügen, and was following up the enemy vigorously when the armistice of Treviso put an end to his movements. From 1801 to

1804 he was minister at the court of Denmark, but between the latter period and 1809 he held no command, the emperor being incensed with him for participating in the defence of Gen. Moreau. In 1809, however, to fill the chasms which death had made in the ranks of the French generals, he was again intrusted with a command, and rendered efficient services to Eugène Beauharnais in Italy. Transferred to the seat of war in Germany, he took part in the battle of Wagram, and by his heroic attack of the Austrian centre, the most important achievement in his military career, gained his marshal's baton, and the rank of duke of Taranto. On the day after the battle Napoleon effected a complete reconciliation with the new marshal, whom he thenceforth learned to trust and esteem. In 1810-'11 Macdonald served in Spain, but added little to his military or moral reputation; in the Russian campaign of 1812 he successfully conducted an independent line of operations toward Riga; and in the campaign of 1813 he fought at Lützen and Bautzen, was badly beaten by Blücher on the Katzbach, Aug. 26, and at Leipsic performed prodigies of valor, escaping from the catastrophe which overwhelmed the rear guard of the French army after the explosion of the bridge over the Elster, by swimming the river on horseback. He steadily adhered to the waning fortunes of Napoleon in the campaign of 1814, and participated in the negotiations ending in the emperor's abdication with a fidelity and consideration which the latter duly acknowledged. Having given in his adherence to the Bourbons, he declined all offers of command from Napoleon during the Hundred Days. He received many distinctions from succeeding sovereigns, but retired from public life during his latter years.

MACDONALD, FLORA, a heroic Scotch woman, born in the isle of South Uist, one of the Hebrides, in 1720, died March 4, 1790. She was the daughter of Macdonald of Milton, who belonged to the Macdonalds of Clanranald. Her father died when she was an infant, and her mother married Macdonald of Arnadale, in Skye, to which island Flora was removed. Of her early life little is known, and until her 26th year she had never been absent from the Hebrides. At that time she was of a fair complexion, of small figure, well proportioned, and of mild disposition and manner. In June, 1746, she left Arnadale, her usual residence, to visit her stepbrother at Milton, in South Uist. While there she made the acquaintance of Capt. O'Neil, one of the companions of Charles Edward Stuart, then on his wanderings after his defeat at Culloden. O'Neil proposed that she should take Charles with her to Skye, disguised as a woman. Though a confirmed Jacobite, she at first positively declined the proposition, the difficulties were so great, guards being posted at every ferry, all boats destroyed, vessels of war commanding the channel between Skye and Uist, and passports required from all travellers. An interview with the prince led

to a change of mind, and she entered warmly into the scheme. Her stepfather, who commanded one of the militia parties in the service of the government, gave her a passport for herself, for a male attendant, for "Betty Bourke, a stout Irish woman," whom Macdonald recommended to his wife as a good spinner, and for 3 others. After a variety of troubles, Flora, the prince, and one attendant sailed from Benbecula, June 28. They encountered serious dangers, but finally reached Skye, where they were assisted by Lady Macdonald, whose husband was then with the duke of Cumberland, commander of the royal forces. This lady consigned the prince and his attendant to the care of Macdonald of Kingsburgh, her husband's factor, who took them to his house, to which Flora also proceeded. Here the services of Flora to the prince ended, during all of which she had exhibited the utmost coolness and courage, without which the unfortunate adventurer must have fallen into the hands of his enemies, who thought they had provided against the possibility of his escape. A price, £30,000, was on his head. The next day the prince bade farewell to Flora, at Portree, in Skye. The part she had taken in this romantic affair soon became known, and she was arrested, and, after 5 month's detention on board vessels of war, was sent to London, where she suffered a mild imprisonment. She was discharged under the act of indemnity in 1747, not a question having been asked of her. Frederic, prince of Wales, is said to have interceded in her behalf, and to have visited her. Placed in the family of Lady Primrose, a noted Jacobite, she was an object of much interest to society. Returning to Scotland, in 1750 she married Macdonald the younger of Kingsburgh. She was visited by Dr. Johnson in 1773. The family emigrated to North Carolina in 1775, and settled in Fayetteville; but siding with the loyalists, they experienced adventures, and met with losses. Mrs. Macdonald embarked alone for Europe, and actually took part in an engagement which the vessel she was in fought with a French vessel, and had her arm broken by a fall. It was not until some time after her return to Scotland that she was joined by her husband. She was the mother of several children, 4 of them being sons, all of whom entered the British service. On her death her body was wrapped in one of the sheets of the bed in which Charles Edward slept on the night he passed at Kingsburgh, the other having been used by his hostess for a similar purpose. This sheet Mrs. Macdonald had carried with her to America, and kept throughout all her wanderings both at home and abroad.

MACDONALD, JAMES, M.D., an American physician, born at White Plains, N. Y., July 18, 1803, died at Flushing, L. I., May 5, 1849. He was graduated M.D. at the college of physicians and surgeons, New York, in March, 1825, and soon afterward was appointed resident physician of the Bloomingdale lunatic asylum. In 1830 he resigned this post, intending to enter

upon general practice. In the spring of 1831 the governors of the New York hospital, of which the Bloomingdale asylum is a branch, proposed to send him abroad to visit the insane hospitals of Europe. He accepted their proposition, on condition that on his return he should have entire charge of the asylum for 5 years, to effect such reforms as might be desirable. In 1837 he resigned his connection with the asylum, and was immediately chosen one of the visiting physicians of the New York hospital, which post he held for 4 years, though interrupted by a visit to Europe in 1839. In 1841 he opened a private institution for the insane, first at Murray Hill, and subsequently at Flushing. In 1842 he was offered the superintendency of the New York state lunatic asylum at Utica, but declined it. The same year he began a course of lectures on mental diseases at the college of physicians and surgeons, probably the first ever delivered in the United States. His published works are: "An Essay on the Construction and Management of Insane Hospitals;" "A Review of Ferrers on Insanity;" "Statistics of the Bloomingdale Asylum" (1839); "A Letter to the Trustees of the New York State Lunatic Asylum, proposing a Plan for organizing that Asylum" (1842); "A Dissertation on Puerperal Insanity;" "Reports on the Condition of the Blackwell's Island Asylum." He was a frequent contributor to the "American Journal of Insanity."

MACDONOUGH, a W. co. of Ill., watered by Crooked creek and its branches; area, 576 sq. m.; pop. in 1855, 12,886. The surface is mostly prairie and the soil productive. The productions in 1850 were 100,102 bushels of wheat, 550,768 of Indian corn, 76,889 of oats, and 78,481 lbs. of wool. There were 6 grist mills, 9 saw mills, 13 churches, and 1,879 pupils attending public schools. The Chicago, Burlington, and Quincy railroad intersects the county, passing through Macomb, the capital.

MACDONOUGH, THOMAS, a commodore in the U. S. navy, born in New Castle co., Del., in Dec. 1783, died at sea, Nov. 18, 1815. He entered the navy as a midshipman in Feb. 1800, and in 1808 was attached to the frigate Philadelphia, Capt. William Bainbridge, one of the squadron employed against Tripoli, under the command of Com. Edward Preble. On Aug. 26, 1808, the Philadelphia captured off Cape de Gatte, on the coast of Spain, the Moorish frigate Meshboa, and McDonough escaped the captivity which subsequently befell the officers and crew of the Philadelphia by being left at Gibraltar with her prize. He afterward served in the schooner Enterprise, Lieut. Comt. Stephen Decatur, participating in the various attacks made in 1804 upon the city and batteries of Tripoli, and was one of the party under the command of Decatur which recaptured and destroyed the Philadelphia on the night of Feb. 16, 1804. In Feb. 1807, he was promoted to the rank of lieutenant, and in July, 1813, to that of master commandant. In 1814 he command-

ed a squadron on Lake Champlain, and on Sept. 8 of that year gained a very important victory over a British squadron commanded by Commodore George Downie. (See CHAMPLAIN, LAKE.) For his distinguished services on this occasion, McDonough was promoted to the rank of captain, and received a gold medal from congress. Numerous civic honors were also bestowed upon him by different cities and towns, and the legislature of Vermont presented him with an estate upon Cumberland Head, which overlooked the scene of the engagement. After the war he performed much active service, and died on his passage home from the command of the squadron in the Mediterranean.

MACDOUGALL, ALEXANDER, an American general, born in Scotland about 1750, died in New York in June, 1788. His father emigrated to New York about 1755, and followed the occupation of a milkman, in which he was assisted by his son. Subsequently the latter became a printer, and in 1770 was imprisoned for a libel on the colonial government. At the outbreak of the revolution, being known as a zealous and active whig, he joined the army, and in 1776 was appointed a brigadier-general. In the succeeding year he became a major-general. Gen. McDougall commanded in the action near White Plains in 1777, and also participated in the battle of Germantown. In 1781 he was elected a delegate to the continental congress from New York, and he was subsequently a member of the New York state senate.

MACDOWELL, a W. co. of N. C.; area, 550 sq. m.; pop. in 1850, 6,246, of whom 1,262 were slaves. The Blue Ridge is on its W. boundary, some of the summits of which are estimated to be over 6,000 feet high. The Catawba rises in these mountains. In the valleys the soil is generally fertile. The productions in 1850 were 5,600 bushels of wheat, 255,262 of Indian corn, and 4,977 lbs. of tobacco. There were 2 grist mills, 2 tanneries, 17 churches, and 775 pupils attending schools. Capital, Marion.

MACDOWELL, PATRICK, a British sculptor, born in Belfast, Ireland, Aug. 12, 1799. In his youth he was apprenticed to a coachmaker in London, who died when Macdowell was about 18 years old. He was then admitted to the studio of a French sculptor named Chenu, where he soon developed a taste for modelling. A design for a public monument to Major Cartwright, the advocate of parliamentary reform, first brought him into notice; but a figure of "A Girl Reading," of which he executed a duplicate for the earl of Ellesmere, decided his reputation. Among his chief works are: "Love Triumphant," a large group executed for Mr. William Beaumont, "A Girl at Prayer," "Cupid," "Early Sorrow," "Psyche," "The Death of Virginia," and "Eve." Since 1846 he has been a royal academician.

MACDUFFIE, GEORGE, an American statesman, born in Columbia co., Ga., about 1788, died in Sumter district, S. C., March 11, 1851. Of humble parentage, he began life as clerk in

a mercantile establishment in Augusta, Ga., where his passion for books attracted the regards of William Calhoun, a brother of his employer, who provided for his education. He was graduated at the South Carolina college in 1813, was admitted to the bar in 1814, and soon established himself in practice in Edgefield, S. C., where he made rapid progress in his profession. In 1818 he was elected to the South Carolina legislature from Edgefield district, and distinguished himself as an eloquent speaker and an able political writer. A political controversy in which he was involved with Col. William Cummings of Georgia led to more than one duel, in one of which he was wounded with a ball, which, being never extracted, affected his health through life. His writings at this time were diametrically opposed to the view of the relations between the states and the confederacy which he subsequently espoused, as he then maintained the principle of consolidation against that of state rights. His various papers on this subject, produced in the controversy with Col. Cummings, were collected by Gen. James Hamilton in a series of pamphlets, entitled "The Crisis." In 1821 he became a member of congress. In Dec. 1823, he introduced a motion for a select committee to inquire into the expediency of recommending to the states a change in the constitution, so as to establish uniformity in the mode of electing the members of the house of representatives, and also a change in respect to the mode of choosing electors for president and vice-president. As chairman of this committee, he made an elaborate report concluding with a resolution. In Jan. 1825, he opposed internal improvements in the states by congress. He was prominent in the debates on the rules proposed to be observed by the house in the election of president of the United States, the discussion deriving most of its interest from the election then pending before that body, in which the candidates were Adams, Crawford, and Jackson. In the 19th congress he argued against the proposed congress of Panama, a favorite measure of President Adams. He also brought up again the subject of amendments to the constitution as to the election of president and vice-president, his main object being to prevent the choice from ever falling into the house of representatives. As chairman of the committee of ways and means, he engaged in the discussion concerning the bank of the United States, and, though now a champion of state rights, he endeavored to maintain this institution. He was a frequent assailant of the protective tariff, and was engaged in the debates on most of the important questions before the house, as the naval appropriations, West Point, emigration of the Indians, office of major-general, pay of members, topographical surveys, culture of silk, inland ports of entry, the Turkish mission, South Carolina claims, minimum duties, and the conduct and rechartering of the bank. In Dec. 1830, he opened the case in a speech of great power for the prosecution in the trial of

Judge Peck, on an impeachment for which the senate had been resolved into a court. Though he had been originally an ardent and efficient supporter of President Jackson, yet his administration had not satisfied the state rights men of the South, and Mr. McDuffie became, like Mr. Calhoun and the politicians of South Carolina generally, his adversary. The measures of the president also in respect to the bank of the United States contributed to make him an uncompromising opponent. In South Carolina, the hostility to the protective tariff policy, which seemed about to be fastened on the country, had reached its climax. The tenor of the argument in that state, maintained by no one more frequently and eloquently than by Mr. McDuffie, was, that by this insidious and indirect method of collecting revenue, by the protection afforded to northern manufactures, by the appropriations for public works falsely pretended to be for the general welfare, and by the combinations of the large commercial and manufacturing against the small agricultural states, the South was annually deprived of millions, to the advantage of favorite peculiar systems and special sections. It was also claimed that Gen. Jackson, though elected as the champion of the South, was, at best a doubtful friend. The result was a political excitement of such intensity that the two domestic parties, the state rights and the union, were on the verge of civil war, while the state itself was making preparations to defy the federal government, and to carry its argument into practice by attempting nullification. The sovereignty of the states as principals, the subordination of the federal government as an agency, lay at the foundation of its reasoning. The Kentucky resolutions, drawn up by Mr. Jefferson, declared: "That the several states who framed that instrument [the constitution], being sovereign and independent, have the unquestionable right to judge of the infraction; and that a nullification, by these sovereignties, of all unauthorized acts, done under color of that instrument, is the rightful remedy." In 1820, and again in 1825, the legislature of South Carolina protested against the protective tariff, and in 1827 gave to the state representatives in congress instructions of the like tenor. In 1828 it entered a protest and resolutions against the right of congress to impose protective duties on imports. More resolutions, addressed to other states, followed in Dec. 1828, and in 1830 the legislature passed resolutions of like import. In 1831 the same body reviewed a letter from President Jackson to the union party of South Carolina, and denounced it as an impertinence and unauthorized interference. In all these proceedings Mr. McDuffie concurred, and he illustrated and vehemently defended them in congress. In 1834 a convention of the people of South Carolina was assembled in Columbia for the consideration of the subject. An elaborate report from a committee was followed by "an ordinance to nullify certain acts of the congress of

the United States purporting to be laws, laying duties, &c., on foreign commodities." This ordinance declared such acts to be null and void, and forbade that they should be enforced within the limits of the state. The convention also published two remarkable addresses, one to the people of South Carolina and the other to the people of the United States, the latter of which was written by Mr. McDuffie. In 1834 he left congress, after making a vehement speech against the administration, and was in the same year elected governor of South Carolina. The college of the state was reorganized by his efforts. At the expiration of his term of office he retired to private life, but in 1842 was elected to the U. S. senate. The failure of his strength obliged him to resign this position, and to terminate his public career in 1846. Probably no one of his colleagues in congress treated so great a variety of difficult subjects more thoroughly, ably, or with more effective eloquence. He did not, like Mr. Calhoun, regard nullification as a constitutional measure, but maintained and justified it as revolutionary, and he was never satisfied with the final settlement of the question by what is called the "Clay compromise." He was one of the most successful planters in the state, and has left an admirable oration delivered before the state agricultural society. For many years before his death he was commonly called Gen. McDuffie, having been a major-general in the state militia.

MACE. See NUTMEG.

MACEDONIA, or MACEDON (the latter name being used, exclusively by English writers, to designate the state or empire, the former designating the land or province), an ancient country of S. E. Europe, N. of Greece, the principal parts of which now belong to the Turkish province or district of Filiba Vilayeti or Makdonia in western Roumelia, which has an area of about 15,000 sq. m., and a population of about 750,000, consisting of Turks, Wallachians, Albanians, Greeks, and Jews. Parts of this province are renowned in modern times for fertility, producing among others abundant and excellent crops of wheat, cotton, tobacco, wine, oil, and fruits. The most ancient name of the country among the Greeks seems to have been Emathia, and subsequently Macetia or Maxetia, the people being called Macetæ. The name Macedonians is first applied to them by Herodotus. They were probably of Illyrian race, and seem originally to have lived in the S. W. part of the country, in the vicinity of Mt. Pindus, whence they spread northeastward, mingling with Thracian as well as Grecian settlers. The reigning house of Macedon is believed to have belonged to the descendants of the latter, or to a Hellenized tribe, and their influence gradually extended the use of the Greek language; but the people were never regarded as genuine Hellenes by their neighbors of the Grecian peninsula and the islands. The boundaries of Macedonia varied in the different periods of its history. In the time of Herodotus, or at least ac-

cording to him, it consisted only of the district extending from the confines of Thessaly to the river Lydias. In a subsequent period it extended E. as far as the Strymon (now Struma), which separated it from Thrace, being bounded N. by Pæonia, W. by Illyria; and S. by Olympus and the Cambunian mountains, which separated it from Thessaly. This may be called Macedonia proper. Philip, the father of Alexander the Great, extended the limits of his kingdom by the conquest of Pæonia on the N., of the Thracian district between the Strymon and the Nestus (Karasu) on the E. (afterward Macedonia Adjuncta), of the peninsula of Chalcidice on the S. E., and of an adjoining district of Illyria on the W. Thus his kingdom was bounded N. by the Scardus, Scomius, and Orbelus ranges, separating it from Mæsia and Dardania, E. by the Rhodope range and Nestus river, separating it from Thrace, S. E. by the Ægean sea (archipelago), S. by the Olympus and the Cambunian mountains, and W. by the northern prolongation of the Pindus and the river Drilo (Drin). It comprised the districts of Pæonia, Pelagonia, Lyncestis, Orestis, Pieria, Emathia, Chalcidice, Bisaltia, and others. Beside the encircling mountain ranges, there were some less important chains in the interior, divided by fertile valleys. Of the rivers, which mostly flow in a S. E. or E. direction into the Ægean, the most important were the Nestus, the Strymon, which flows into the gulf of its name, and the Axios (Vardar), which received the waters of the Lydias, and like the Haliacmon (Vistritza) flows into the Thermaic gulf (gulf of Saloniki). The southern part of Chalcidice, washed by the Thermaic, Toronaic, Singitic, and Strymonic gulfs, was divided into the 3 minor peninsulas of Pallene, Sithonia, and Acte, the last of which terminated in Mt. Athos, and was said or fabled to have been cut through by Xerxes on his invasion of Greece. Among the cities were: Ægæ, or Edessa, the residence of the early kings; Pella, that of Philip and his son Alexander; Thessalonica (Saloniki, now the largest town), that of Cassander, at the head of the Thermaic gulf; Olynthus, formerly one of the most powerful cities of Thrace, besieged, taken, and destroyed by Philip; Potidæa, a colony of Corinth, conquered by Athens, and subsequently by Philip; Chalcis, a colony of the town of

the same name in Eubœa; Amphipolis, a colony of Athens, near the mouth of the Strymon; Philippi, founded by Philip, and renowned for the battle of its name (42 B. C.), which terminated with the victory of the triumvirs and the death of Brutus and Cassius; Stagira, the birth-place of Aristotle; Pydna, where Perseus was defeated by the Romans under Æmilius Paulus (168 B. C.); Diium, Pelagonia, Bercæa, Methone, Stobi, and Acanthus. Under the Romans the province of Macedonia included large portions of the neighboring western and southern countries, extending from the Ægean to the Adriatic, and being bounded S. by the province of Achaia, which included the largest part of Greece.—Macedon, having been founded by Perdiccas I., first appeared in history under Amyntas, a contemporary of Darius, the first Persian invader of Greece (about 500 B. C.), was made powerful and the virtual mistress of Greece by Philip (359–336), son of Amyntas II., and the greatest empire of the period by the conquests of his son Alexander (336–323), decayed under the successors of the latter, was broken by the two victories of the Romans at Cynoscephalæ (197) and Pydna (168), and made a Roman province after various insurrections and the final defeat of the Achæans in 146. Its history is closely connected with that of Greece, and we refer our readers to the history of that country (vol. viii. p. 451 *et seq.*), as well as to the lives of the most important Macedonian monarchs.

MACFERRIN, JOHN BERRY, D.D., an American clergyman, born in Rutherford co., Tenn., June 15, 1807. His grandfather McFerrin was a soldier in the American revolutionary war, and his father, the Rev. James McFerrin, was an officer in the war of 1812. He was educated in the common schools of Tennessee and N. Alabama, became a minister, and joined the Tennessee conference of the Methodist Episcopal church in 1826. He was for two years a missionary to the Cherokee Indians, and was editor of the "South-Western Christian Advocate," at Nashville, from 1840 till May, 1858, when he was made book agent of the M. E. church, South. He was a member of the Louisville convention in 1845 which organized the M. E. church, South, and assisted in compiling the history of that organization.



