

Banteng, Malay name of the *Bos sondaicus*, a species of wild ox found in the E. Indian islands and the Malay Peninsula. As ferocious as the Indian gaur, which it resembles in the lack of a dewlap and in some other points, it has yet been tamed and used for breeding purposes.

Banting System, a method of curing corpulency, proposed by Harvey, but first effectively practised by William Banting (1796-1878) of Kensington. It is described in detail in Banting's *Letter on Corpulence* (new ed. 1885). See FOOD and FEEDING.

Bantry, seapt., mrkt. tn., and tourist resort, Co. Cork, prov. Munster, Ireland, 51 m. w.s.w. of Cork, picturesquely situated at head of BANTRY BAY (20 m. long by 6 broad), which is a naval centre during the autumn manœuvres. Friezes, tweeds, etc., are manufactured, but the fisheries are of the first importance. Pop. 3,000. The BATTLE OF BANTRY BAY was a naval engagement fought on May 1, 1689. Louis XIV., in support of James II., after the latter's deposition, sent a fleet of 24 ships of the line, 2 frigates, and 10 fire-ships, under Comte de Châteauneuf, to the coast of Ireland. They were found in Bantry Bay by a British fleet of 19 ships of the line and 3 fireships, under Admiral Arthur Herbert. After the action which ensued the British drew off, having had the worst of it.

Bantu, a race of people widely spread in S. and S.W. and S.E. Africa, their original cradle being in the N. and in Equatorial Africa. Their language, with its dialectical variations, may be termed the *lingua franca* of inner Africa. In the Cape of Good Hope, where their arrival on the E. has been recent, they are known as Amaxosa, Slam-bies, Tambookies, Gaikas, Galekas, Fingoes (*i.e.* slaves), Tembus, and Pondos. Sometimes they are

termed Caffres or Kaffirs, as a convenient generic term covering all varieties: this word means 'unbelievers,' and was given to them originally by Mohammedans on the coast. The Bantus must be distinguished from the aboriginal Bushmen and Hottentots. In Natal the great branch of the Bantu race is the Zulus; in Rhodesia, the Matabele and the Mashonas; in S.W. Africa, the Damaras. The tendency of the Bantu race has been to form conquering castes under paramount chiefs—as Kreli and Sandili, in the E. of the Cape of Good Hope; Mose-likatze, Chaka, Dingaan, and Cete-wayo, in Natal and the north: but these have all disappeared before the Europeans. The Bechuanas still retain a system under chief Khama, as do the Basutos under their headmen. Swaziland is also quasi-tribal. See Deniker's *Races of Man* (1900); Torrend's *Comparative Grammar of the South African Bantu Languages* (1894).

Bantwa, trib. state, prov. of Gujarat, Bombay, India. Area, 208 sq. m. Chief manufacture, coarse cotton cloth. Bantwa, the chief town, is 80 m. N.W. of Diu. Pop. 8,600.

Banville, THÉODORE FAULLAIN DE (1823-91), French poet, born at Moulins. In 1842 he published *Les Cariatides*, a volume of verse; and in 1846 *Les Stalactites*, in which he showed a mastery over French verse of what then seemed a new type. But he first attracted general attention by a number of fugitive odes, collected from ephemeral journals, and published in 1857 under the title of *Odes Funambulesques*, followed by another series in 1867, *Nouvelles Odes Funambulesques*, and by a volume of verse entitled *Idylles Prussiennes*, commemorating the war of 1870-1. Banville also wrote a valuable treatise on French versification, as well as novels and plays, the latter including *Grin-*

goire (1866), translated by Sir Walter Besant and Mr. W. H. Pollock, under the title of *The Balladmonger*, in *The Charm, and other Plays* (1896), and played by Sir H. Beerbohm Tree. See his *Poetic Works*, in 3 vols. (1878-9), also his *Comédies* (1878) and *Esquisses Parisiennes* (1859). *Mes Souvenirs* appeared in 1882.

Banyan or Banian Tree (*Ficus bengalensis*), of the fig order Moraceæ, is found in India. So called because frequently used as market-places by the Banians or Indian merchants. As the branches spread they send down aerial roots which penetrate the soil, becoming stems or trunks. In this way one tree in course of time may form thousands of props. The Hindus assist the development of the aerial roots by preparing the soil, and by protecting the young roots within bamboo tubes as they approach the ground. For a time the young banyan lives as an epiphyte, but gradually its aerial roots reach the ground and form the first props, its branches spreading until the tree which was its first resting-place decays. An abundance of gum-lac is procured from the banyan, the bark of which is used as a tonic by Hindu physicians. See Kerner's *Nat. Hist. of Plants* (new ed. 1902).

Banyuls-sur-Mer, fishing village and bathing resort, dep. of Pyrénées-Orientales, France, on the Mediterranean, 20 m. by rail S.E. of Perpignan. A marine biological laboratory was established here in 1874. Pop. 3,000.

Banyumas, or BANJOEMAS, residency of Central Java, in the E. Indies, stretches from the mountain backbone S. to the Indian Ocean. Area, 2,147 sq. m. Pop. 1,270,000. Cap. Banyumas, about 7° 33' S. lat. and 170 m. S.E. of Batavia.

Banyuwangi, tn., Java, Dutch E. Indies, on the E. coast, over

against the island of Bali; formerly capital of the native kingdom of Balambangan. Pop. 16,000.

Baobab, also called MONKEY BREAD and SOUR GOURD, is *Adansonia digitata* (named in honour of Adanson, the great French naturalist), a tree of the order Malvaceæ, and found in most parts of tropical Africa. It is one of the largest and oldest trees in the world, with a trunk often more than 20 ft. in diameter. The bark is fibrous, and is stripped off for making ropes and clothes; it is also used as a febrifuge. The leaves are dried, and made into a powder called *lalo*, which is used by W. Africans as a condiment. The large white flowers have stalks 3 ft. long. The fruit has a woody coat, is considerably larger than a large lemon, and contains seeds embedded in an acid pulp which is eaten by the natives. The tree has been acclimatized in S. America and the E. Indies.

Bapaume, tn., dep. Pas-de-Calais, France, 15 m. S. by E. of Arras; notable for the fierce struggles of Jan. 2 and 3, 1871, between the French and the Germans, in which the former lost over 2,000 men, but claimed a victory. Pop. 3,000.

Baphomet (probably a medieval corruption of Mahomet), the name given to the mysterious two-headed idol which the Templars were said to worship with secret licentious rites.

Baptanodon, a late ichthyosaurian which, in the Middle Jurassic period, had its home in the waters of Colorado and Wyoming. It is the only type of the aquatic ichthyopterygian reptiles found in America. Amphibious and toothless, both these characteristics are noted in its name. Its length was from 9 to 11 ft.

Baptism, the rite of initiation into the Christian church, performed by sprinkling with or im-

mersion in water, and recognized almost universally throughout Christendom as a sacrament.

1. *Origin.*—The origin of Christian baptism would appear to be what is called 'the baptism of John' (Mark 11:30), which, again, was doubtless suggested by the Jewish practice of baptizing proselytes. When a Gentile desired admission into the commonwealth of Israel, he required to be circumcised, and in later times a form of baptism was also administered: the candidate stood immersed to the neck in water, and had the commandments recited to him. The distinctive feature of 'John's baptism' was that it was administered to Israelites themselves, as a token of their entrance into the new Messianic kingdom, thus having a moral and spiritual (*cf.* 'unto repentance,' Matt. 3:11) rather than a merely legal or ethnological significance. It is likely that the act of baptism practised by the disciples of Jesus while He was still with them was identical with John's rite; but an entirely new stage is reached in the practice enjoined by our Lord's words (Matt. 28:19).

2. The distinctively Christian rite is so far congruent with that administered by John, being (*a*) a condition of entrance into the Messianic kingdom, and (*b*) a symbol of a moral change in the recipient. But the baptism of the disciples of the risen Lord was, further, the voucher of a *new life* to the individual submitting to it, and of his union with Christ; which privileges were conferred by the gift of the Holy Spirit. The converts were to be baptized 'into' the name of the Trinity; and though the disciples seem at first to have used the name of Jesus (or Christ) only (Acts 2:38; 8:16), in course of time the original mandate came to be more literally obeyed. It may be re-

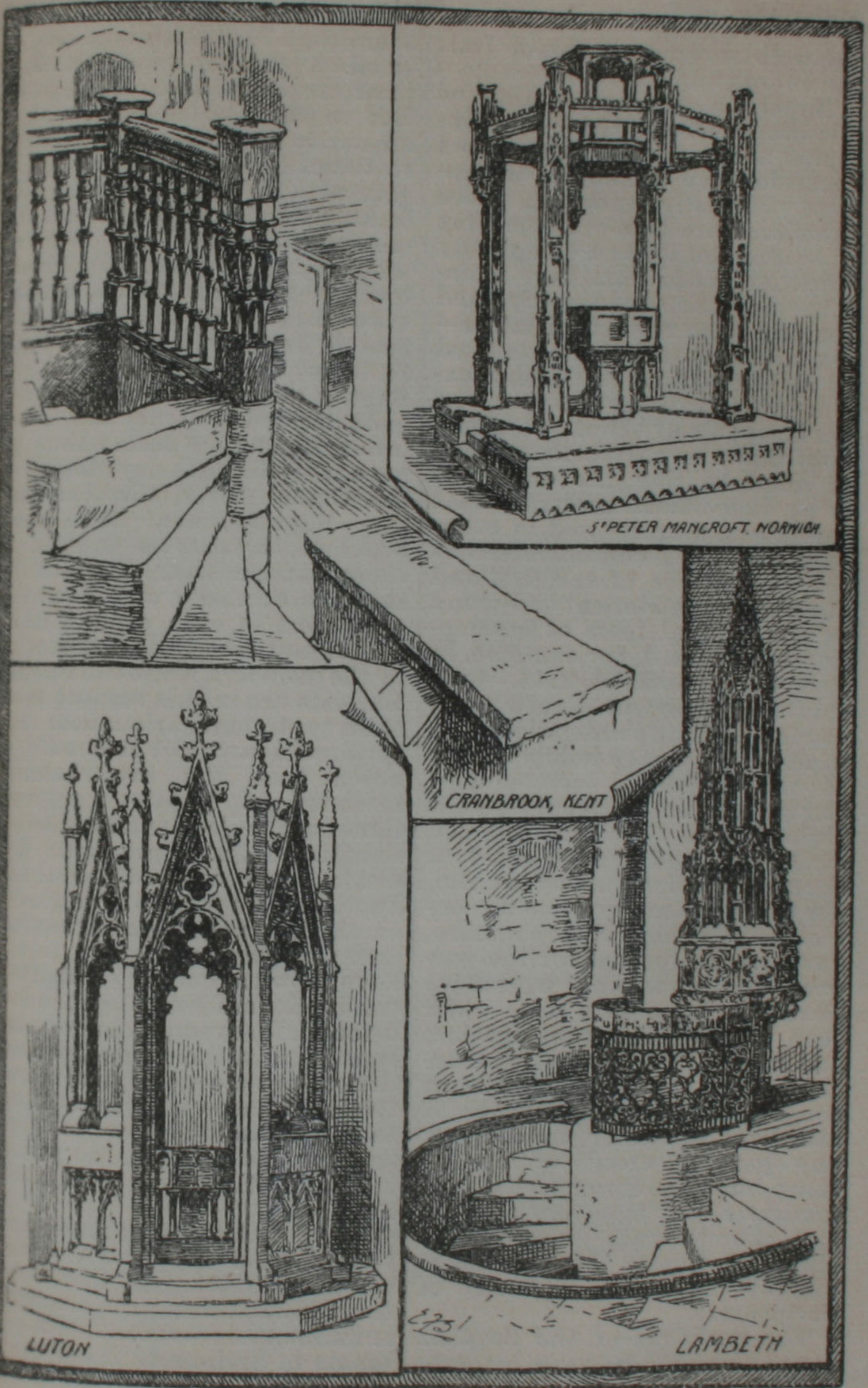
marked that Deissmann (*Bible Studies*, pp. 146 *f.*, 196 *f.*, 1901) has shown, from the evidence of recently-discovered inscriptions, that 'name' used in this manner signifies *power, dominion*; so that to baptize into the name of any one means to place in the possession or at the absolute disposal of the same. Hence the usage 'into the name' instead of 'in the name' more adequately expresses the close connection between the person initiated and the Deity; he is no longer his own, but another's.

3. *Controversies.*—These are neither few nor unimportant, and we proceed to consider some of them. (1.) *The Baptism of Infants.* The question of the eligibility of the infants of Christian parents for baptism hardly seems to have arisen in New Testament times, the converts being necessarily of sufficient age to make profession of their faith. But it must have emerged very soon, probably in a few years—when children were born in Christian homes. The church, proceeding on the analogy of circumcision, and in view of Christ's declaration regarding children (Mark 10:14), of Paul's statement (1 Cor. 7:14) that the children of believers are holy, and of the fact that in the case of some a minimum of preparation had been deemed sufficient by the apostles (Acts 16:31 *f.*), sanctioned the practice, which soon became general. The opponents of infant baptism, however, point out that the practice is nowhere commanded or even countenanced in Scripture, that our Lord's commission (Matt. 28:19) plainly connects the ceremony with teaching, and that the apostles always restricted baptism to believers, as the symbol of a conscious change which had already taken place (Acts 10:43, 48); while they repudiate the analogy of circumcision in view of the essential distinction between

the Jewish theocracy as an earthly kingdom and the kingdom 'not of this world.' Such are the salient points in the controversy; for the rest the reader is referred to the literature given at the end. (2.) *The Manner of Baptism.* There is little doubt that the original practice was immersion (Matt. 3:6, 16; Acts 8:38), but it is equally undeniable that sprinkling or pouring was sometimes substituted at a very early period. It may be questioned whether immersion could have been possible in the instance of the Philippian jailer, and it is probable that in such cases as his, or where large numbers of both sexes were baptized at one time, the church's common sense seemed to demand the simpler and more convenient form of pouring (affusion—the Roman Catholic form to this day) or sprinkling. It should also be noted that *baptizo* does not necessarily mean 'immerse' (see Luke 11:38, where 'wash' is literally 'baptize'). (3.) *Lay Baptism.* Can baptism be properly administered by the clergy only? or is it equally valid when performed (in certain cases) by the laity? Scripture throws no decisive light on the question. It has generally been held that baptism by duly qualified ministers is desirable; but in cases of imminent death, when no minister was at hand, the administration of the rite by laymen, or even by women, was deemed perfectly valid. The custom had its rise, of course, in the belief that baptism was essential to salvation. Lay baptism was formerly permitted in the Church of England, and is still in the Church of Rome. In the reformed churches generally, however, where the necessity of baptism is not regarded as being absolute, its administration is confined to the regularly ordained ministry. (4.) *Baptismal Regeneration.* It is held by the Church of Rome and by ritualistic

Anglicans that baptism confers even upon infants an 'indelible' character—*i.e.* actually changes the standing of the person baptized before God. Most Protestants believe that the act removes the guilt of original sin but regard the change of character as something that can only be acquired consciously, and apart from any necessary connection with an external ceremony such as baptism. They hold that the act changes the relation of the person to the church, but that, either before or (as in the case of infants) after, the privileges symbolized by baptism are to be consciously and voluntarily embraced. Thus, the omission of it, as in the case of a child dying shortly after birth, is not considered by Protestants to involve any detriment to the eternal interests of the individual; but, on the other hand, the neglect of it when easily obtainable is deemed to say the least, presumptuous, harmful, and even perilous. See Hodges's *Baptism Tested by Scripture and History*, Ingham's *Christian Baptism* (1865), Stone's *Holy Baptism* (1899), Wall's *History of Baptism* (1862), and articles in Smith's (1869) and Hastings's *Bible Dictionaries*.

Baptistery, or BAPTISTRY, a building where the sacrament of baptism is publicly administered. Originally Christian baptism was performed at the river-side, or at founts where springs of water flowed. The first built baptisteries were not, as now our fonts are, within the church, but without, and often in places very remote from it, distinct from the church, and connected with it only by a passage or cloister. Afterwards they formed a constructional part of the church, towards the west end. There are several old specimens in England—at Norwich, Lambeth, and Luton; and those at Asti, Novara, Pisa, and Florence



Famous Baptisteries in English Churches.

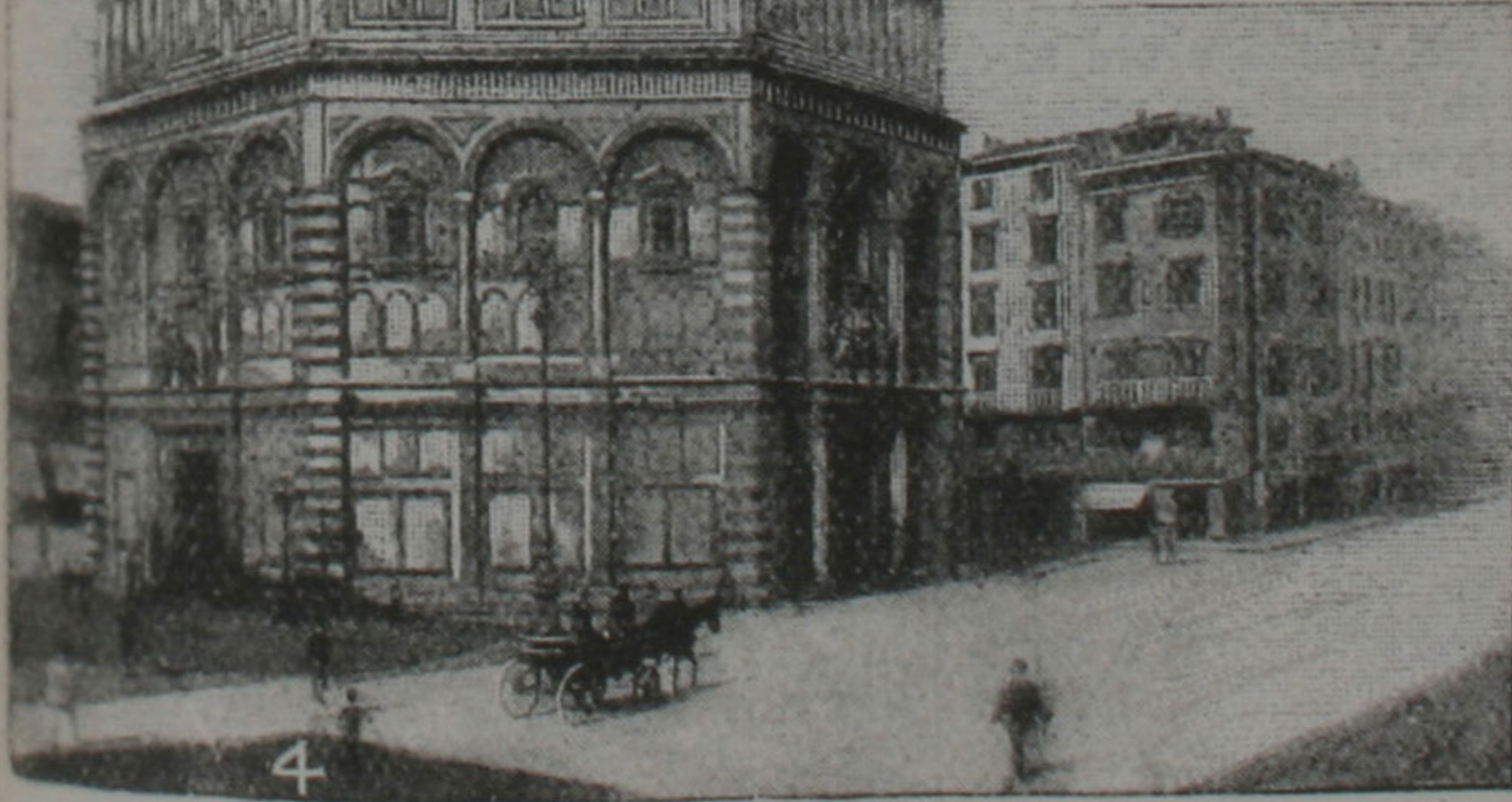
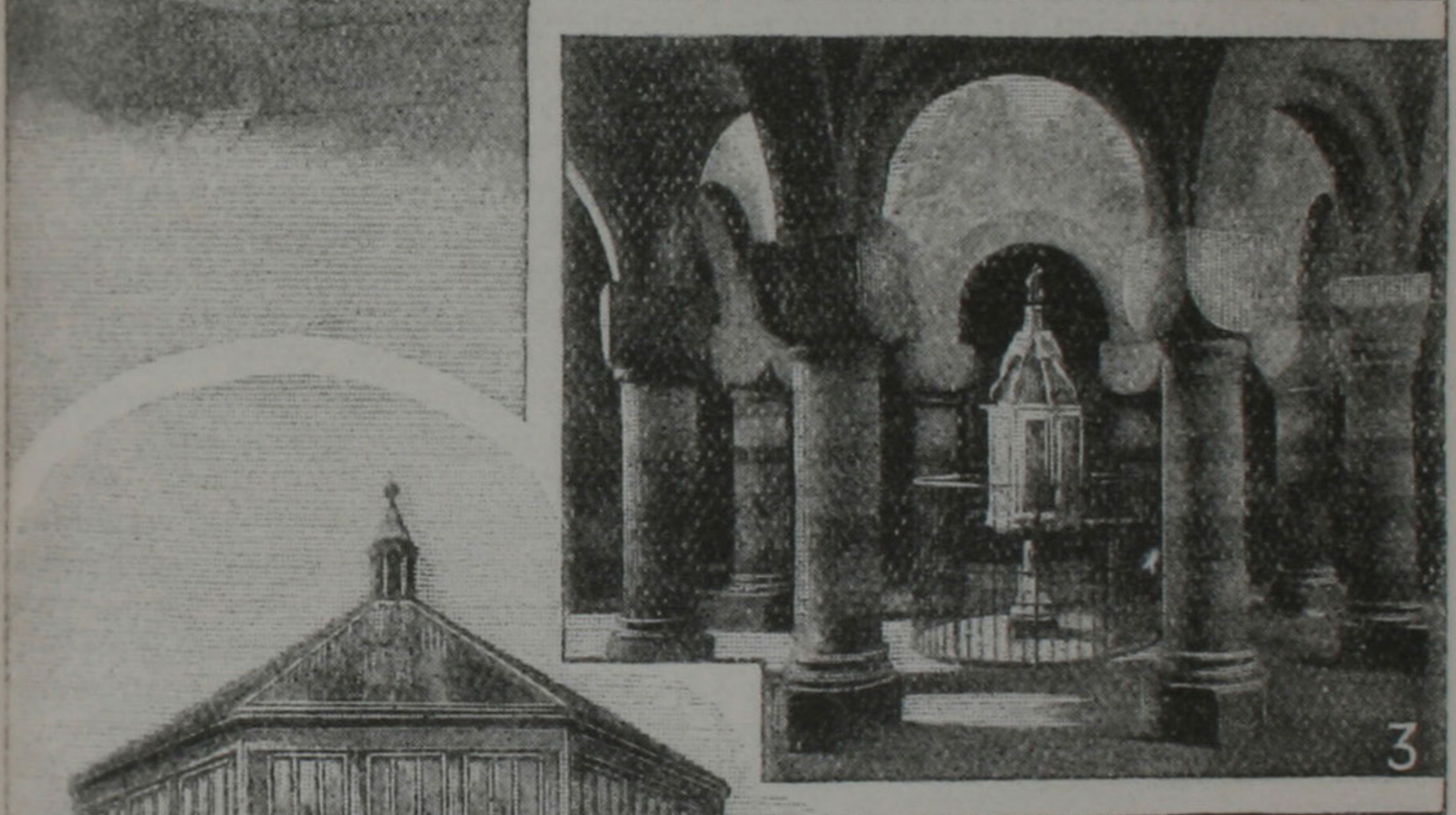
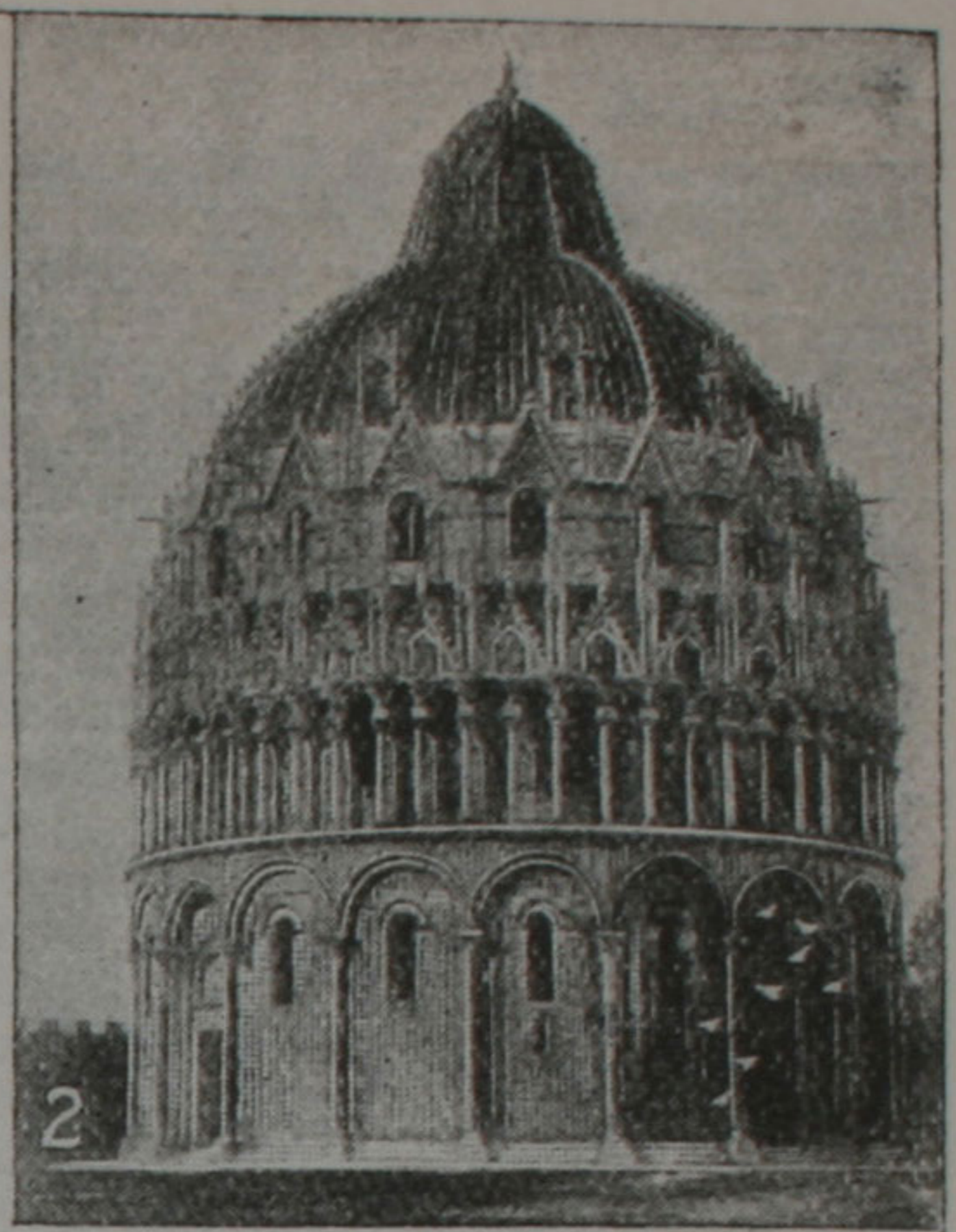
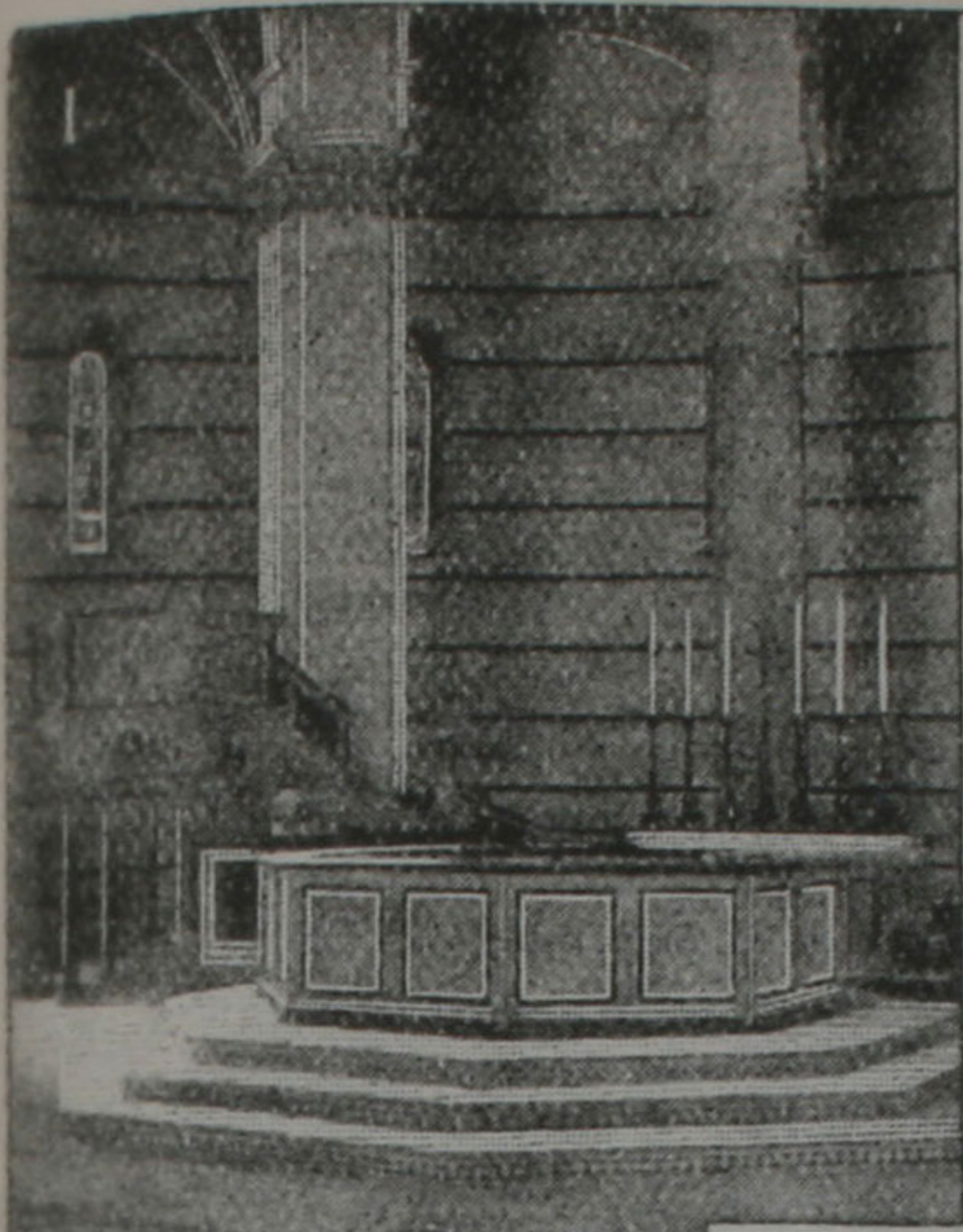
are well-known examples of Italian church architecture.

Baptists, a denomination of Christians whose distinctive principles are found in their views regarding the ordinance of baptism. Broadly speaking, these principles are two. (1.) Looking upon the church as a completely spiritual institution, they maintain that the membership (and therefore the rite of initiation—viz. baptism) ought to be confined to believers only; this tenet excludes the baptism of infants, who are incapable of belief. (2.) They hold that the only correct mode of administering the ordinance is by immersion, asserting that sprinkling, as practised in other sections of the church, obscures the significance of the rite, and disannuls its historical testimony to the cardinal facts of redemption as indicated, for example, in Rom. 6:1-11 and Col. 2:12. As to church government, Baptists are at one with the Congregationalists in maintaining the independence of the individual community; though various national Baptist Unions (*e.g.* Scottish, English, etc.) exist, and though most of the congregations belong to them, yet these unions exercise no control over the individual churches, having been formed for the purpose of organizing aggressive Christian work on a scale wider than that of the congregation, and for mutual support and encouragement. This doctrine of congregational independence is also held to render unnecessary any general creed or confession; but it is assumed that all ministers and members of Baptist churches accept the principle of liberty of conscience and of the divine authority of Scripture.

The doctrines of the Baptists cannot be said to have hitherto made much headway in Britain. In 1909 in the United Kingdom

there were 7170 Baptist places of worship, 424,005 members, 5615 local preachers, and 2078 pastors. But in the United States they appear to find congenial soil: the statistics for 1904 show an aggregate of 6,157,009 members, with 64,335 churches, 42,815 pastors and missionaries, 2,771,632 Sunday scholars, and 9 theological institutions—numbers which, among evangelical churches, are surpassed only by the Methodists. It is in America, too, that the Baptist denomination shows the most decided tendency to split up into fragmentary sects: thus we have the Seventh-day Baptists, the Campbellites, the Anti-mission Baptists, etc. The term Scottish Baptists is applied to those communities which maintain the necessity of a plurality of pastors in each congregation, and of mutual public exhortation by the members, while the English Baptists are in this respect more akin to Congregationalists and Presbyterians; but it should be noted that the overwhelming majority of Baptist congregations even in Scotland hold to the so-called English practice. The distinction between General and Particular Baptists was originally similar to that between Arminians and Calvinists; but the former have shown a tendency to drift towards a laxer Christology, such as is found, for example, in Socinianism. Finally, the terms Open and Strict Baptists are applied respectively to those who permit, and to those who disallow, to Pædobaptists the privilege of partaking with them of the Lord's Supper.

The Baptists are not concerned to trace their origin to any great reforming movement in the history of the church, but are content to find support for their distinctive tenets in Scripture. They maintain, indeed, some sort of historical continuity with the early



- 1. Pisa :
interior ;
- 2. Pisa :
exterior.
- 3. Asti :
S. Pietro.
- 4. Florence.

church—*e.g.* through the Cathari, the Albigenses, and other bodies; but they repudiate all connection with the German Anabaptists and Mennonites of the 16th century. There is, however, a historical connection between the more moderate of the 16th-century Anabaptists and the later Baptists. Anabaptists was a term applied generally to the more radical dissenters of the Reformation period, and was not limited to such fanatics as those of Münster. Many of those who advocated adult baptism were not concerned in those fanatic excesses. See Mackinnon's *History of Modern Liberty*, vol. ii. (1906). In England they emerged into public notice in the time of Henry VIII., and in his and the succeeding reigns they suffered persecution or laboured under disabilities till the Act of Toleration (1689) placed them on a level with other denominations. Their doctrines appear to have been transplanted to America about 1630; in 1691 was formed the great division between Particular and General Baptists above referred to. Though not the first missionary society (1792) among English-speaking Christians, they were amongst the earliest religious bodies to engage actively in missionary work, William Carey being the pioneer of the movement.

Full statistical particulars and much general information regarding the Baptists will be found in the year-books of the American, English, and Scottish Baptist Unions. For early history see Heath's *Anabaptism* (1895); Barclay's *The Inner Life of the Religious Societies of the Commonwealth* (1876); the *Publications of the Hanserd and Knollys Society*.

Bar, Aramaic for 'son;' a common constituent of Jewish names—*e.g.* Bar-jesus, Bartimæus, Bartholomew.

Bar. (1.) In heraldry, one of the *honourable ordinaries*. It differs from the fess only in its size (*i.e.* height), which is but one-fifth of the field, and in the fact that it may be borne in any part of the shield. Its diminutives are the *closet*, which is half a bar; and the *barrulet*, which is half a closet. Any number of bars, not exceeding four, may be borne. When two barrulets are borne in close proximity, they are blazoned collectively—two bars-gemelles (Fr. *jumelle*, 'twin'). *Bar sinister*, the popular, but erroneous, term for the 'baton sinister,' the mark of illegitimacy. (2.) In music, an upright line drawn across the stave to regulate the accent and divide the music into equal portions as determined by the time signature. Each portion is termed a *measure*, but is sometimes incorrectly called a bar. A *double bar*, consisting of two lines, denotes the end of a complete section or movement, or the introduction of a change of time or key. (3.) In geography, the silt bank at the mouth of an estuary.

Bar, collective term comprehending all those members of the legal profession who have the right to appear at the bar on behalf of suitors. See BARRISTER, ADVOCATES, INNS OF COURT.

Bar (*Rov*), fortified tn. of Podolia, Russia, 50 m. N. of Mohilev, on an affluent of the Bûg. The famous Confederation of Bar, in the Polish Catholic and patriotic interest, was formed here (Feb. 29, 1768). Pop. 11,000, more than half Jews.

Bar, TRIAL AT. Before the institution of *nisi prius* trials by the Statute of Westminster in 1285, all trials were 'at bar'—*i.e.* they were before two or more judges sitting *in banc*. A trial at bar now comes before a divisional court; but they are very rare, and may always be refused to private

individuals, though the attorney-general may sometimes claim such a trial as of right. There have only been three trials at bar since the Judicature Acts came into force—viz. the Attorney-general v. Bradlaugh in 1885, the trial of the Jameson raiders in 1896, and of Lynch for high treason in 1903.

Bara Banki, dist., United Provs., India; area, 1,703 sq. m.; a plain, watered by the Gogra and the Gumti. Grows wheat and rice; coarse cloth and brass and iron vessels are its manufactures. Pop. 1,180,000. The chief town is Nawabgani, or Bara Banki, 15 m. E. of Lucknow. Pop. 15,000.

Bar Council, a consultative and advisory body organized in 1894 to be the accredited representative of the bar, and to deal with all matters affecting the profession. It consists of the attorney-general and the solicitor-general for the time being, and every practising barrister who has held either of these offices, together with forty-eight practising barristers elected by the whole bar. The council can co-opt six additional members. Offices, 2 Hare Court, Temple, E.C.

Baraba Steppe, immense tract (estimated at 100,000 sq. m.) in the govts. of Tobolsk and Tomsk, Siberia; stretches N. from the Altai Mts., and E. and W. between the Obi and the Irtysh.

Barabbas ('son of the father,' i.e. 'teacher'), a robber or house-breaker (rather than insurgent), whose release was demanded from Pilate in preference to that of Jesus. An interesting reading in some of the later MSS. of Matthew, and in the Armenian and other versions, gives the robber's name as *Jesus Barabbas*, which would then form a striking contrast to the name *Jesus Christ* in Matt. 27:17; but it is probably due to a copyist's error (Tregelles). But see Renan's *Life of Jesus* (trans. 1897).

Baraboo, city, Wisconsin, U.S.A., co. seat of Sauk Co., 35 m. N.W. of Madison; noted for dairy produce and fruit canning. Pop. 6,000.

Barabra, or BARABIRA (Negroid Núbas), a Mohammedan and agricultural people occupying both banks of the Nile, Nubia, between Assouan and Dongola.

Barada, or BARRADA, riv. in Syria; the ancient Abana; rises in Anti-Lebanon, flows S.E. to Damascus, then E., and loses itself in the lake of Bahret-el-Ateibeh.

Baraguay d'Hilliers. (1.) LOUIS (1764-1812), French general, was born at Paris. He distinguished himself in Italy, Egypt, and Russia under Napoleon. He died at Berlin. Barbier attributes to him *Mémoires Posthumes du Général Français Comte de Custine* (1794).

(2.) ACHILLE, COMTE (1795-1878), French marshal, son of the above, born at Paris, was appointed governor of the military school at Saint-Cyr (1836). In 1848 he was given command of the army of Paris by Napoleon III. (1851). He distinguished himself in the Crimea, and in Italy in 1859. After the Franco-Prussian war he was president of the council appointed to inquire into the capitulation of Bazaine at Metz.

Barahona de Soto, LUIS (1560-1590), Spanish poet. His principal work is a continuation of *Orlando Furioso*, called *Angelica* (1586; 2nd ed. 1602-5), highly praised in *Don Quixote*, and also by Lope de Vega in the *Laurel de Apolo*. He wrote some graceful lyrics included in Espinosa's collection of *Flores de Poetas Ilustres* (1849).

Baranetz, or BAROMETZ, or SCYTHIAN LAMB, a fern (*Cibotium barometz*) growing in the neighbourhood of the Caspian Sea. The name is also given to an especially fine variety of lamb's wool, which legend asserts to be yielded by a plant which is also at the same time an animal (lamb).

Baranov, or SITKA ISLAND, in Alexander Archipelago, Alaska, U.S.A.; lat. 57° N., long. 135° W.; 100 m. long by 25 m. in width. Very mountainous (highest summit, Mt. Edgecumbe, 8,000 ft.), and densely wooded. Coal is found in many places, gold is worked, and there are large fur, fishing, and canning interests. Sitka, on the W. coast, is the capital of Alaska dist. Pop. 1,400.

Baranquilla. See BARRANQUILLA.

Barante, PIERRE AIMABLE PROSPER BRUGIÈRE, BARON DE (1782-1866), a French historian and politician. His chief works are: *Tableau de la Littérature Française au XVIII^e Siècle* (1809); *Histoire des Ducs de Bourgogne de la Maison de Valois, 1364-1477*, 12 vols. (1824-8); *Histoire de Jeanne d'Arc* (1859; 4th ed. 1880). His *Souvenirs* were published in 8 vols. (1890-1901). See Guizot's article in the *Revue des Deux Mondes*, July 1867.

Barasat, munic. tn. in the Twenty-four Parganas, Bengal, India, 14 m. N.E. of Calcutta. Pop. 9,000.

Barataria (Sp. *barato*, 'cheap'). (1.) The so-called 'island' over which Sancho Panza was installed mock governor. See *Don Quixote*, pt. ii. ch. 42-53. (2.) The imaginary kingdom in Gilbert and Sullivan's *Gondoliers* (1889).

Baratieri, ORESTE (1841-1901), Italian general, was born at Condino, Tyrol, and served with Garibaldi. Appointed governor of Eritrea in 1891, he in 1894 defeated the Dervishes at Kassala. Then after routing (1895) Ras Mangasha he took possession of Adigrat and Tigré, but was himself disastrously defeated at Adua in March 1896. He defended himself in his *Memorie d'Africa, 1892-6* (1897).

Baratynski, YUGENI ABRAMOVITCH (1800-44), Russian poet; served as a soldier in Finland,

during which he wrote his first poem, *Eda* (1826). He afterwards settled at Moscow, and produced his finest work, *The Gypsy*. A collected edition was published in St. Petersburg (1869; 4th ed. 1884).

Barava, or BARAWA, tn., E. Africa. See BRAVA.

Barb. (1.) The tip of an arrow or a fish-hook, so made that it can with difficulty be extracted from a wound. (2.) The name applied to a Barbary or Arab horse.

Barbacena, tn., prov. Minas Geraes, Brazil, on W. slope of Sierra de Mantiqueira or Espinhaço; on railway 130 m. N. by W. of Rio de Janeiro. Alt. 3,500 ft. Gold-mining. Pop. 6,000.

Barbacoas, tn., Colombia, 130 m. N. by E. of Quito, Ecuador, on the Telembi, which is navigable by steamers. Gold exists in the district. Pop. 6,000.

Barbados, island of the W. Indies, about 125 m. E. of the chain of the Lesser Antilles. The people are mostly of negro or coloured race, and are engaged in sugar cultivation. The capital, Bridgetown (about 35,000), is a port of call and repair, where passengers and goods from Europe are transhipped to the steamers which run northwards to the Virgin Is. and south to Trinidad. Of the total area (166 sq. m.) nearly one-third (about 35,000 ac.) is planted with the sugar-cane. Bridgetown is a bishop's see, and the headquarters of the military forces in the W. Indies. Here is Codrington Theological College (1712), affiliated to Durham University. The annual value of imports is about £1,200,000, and of exports, nearly £1,000,000. The island is frequently visited by hurricanes. Barbados—so named by the Portuguese from the bearded fig-trees found there—has been a British colony since 1605. Pop. 200,000. See Edghill's *About Barbados* (1890) and Stark's *Barbados* (1893).

Barbados Cherries, edible fruits of two species of trees of the order Malpighiaceæ, which is closely related to the flax order. They are native to the W. Indies.

Barbados Gooseberry, the fruit of the W. Indian cactus (*C. Pereskia*).

Barbados Leg, another name for ELEPHANTIASIS.

Barbara, a mnemonic word—as containing three *a*'s—used in formal logic to denote a syllogism of the first figure, all of whose propositions are universal affirmative.

Barbara, St., suffered martyrdom at Nicomedia in Bithynia, about 235 A.D. She is the patron saint of artillerists; her image is often seen on guns, and the powder magazine of a French man-of-war was formerly called a *Sainte-Barbe*. Her feast is on December 4.

Barbarians (Gr. *barbaros*). Among the ancient Greeks the word was applied to all foreigners—those who could not speak Greek, including even the Romans, until the Greek language was cultivated by the latter, when the word was confined to the Teutonic and Scythian races. Before the fall of the empire the Romans applied the term to a foreigner who could speak neither Latin nor Greek. It was in Egypt a term both of dread and contumely, in which sense it may have passed to the Greeks and Romans. An important period in European history was that of the barbarian invasions (395–527 A.D.). The invasion of Greece by the Visigoths under Alaric (396 A.D.) led to the dismemberment of the western half of the empire. Britain was the first portion to be given up, and about the same time barbarian hordes, after making their way through Gaul, entered Spain in 409 A.D. They were a mixed band of Vandals, Suevians, and Alans. The Van-

dals were two German tribes—the Asdings and the Silings; the Suevians were Teutons, and the Alans a Caucasian race. They were scarcely settled in their Spanish territories when, in 412 A.D., the Visigoths or West Goths swooped down on them, and took Lusitania from the Alans, and Bætica from the Silings, whom Wallia, the Gothic king, exterminated. In 429 A.D. Spain was abandoned by the Vandals and the Alans, who crossed to Africa. The Emperor Honorius, for the services of the Visigoths in Spain, rewarded them with two large territories in Gaul, consisting of Aquitania and Toulouse, which they formed into the second Visigothic kingdom, the first having been founded in Spain, with Barcino (Barcelona) as its capital. The Visigoths added to their possessions, till in 490 A.D. they reached from the Loire to the Garonne. The next barbarian invasion was that of the Franks, who took possession of the greater part of Visigothic Gaul. The Huns—Asiatic nomads—are the next to figure as invaders, under Attila, their sway extending from the Rhine to the Volga, from the Danube to the North Sea. By the confederated German tribes, in 454 A.D., the power of the Huns was destroyed at the river Netad in Pannonia, and other barbarians took possession of their territory—the Gepidæ, a German tribe, seizing Dacia and Jazygia, the Ostrogoths taking Pannonia, the rest of the territory falling into the hands of other German peoples. The Alemanni settled in the northern part of Rhætia, and they had as neighbours the Thuringians. Italy, as well as Gaul, suffered from the invasions of barbarians. In 476 the Rugians erected a German kingdom in Italy under Odoacer, which continued till the Ostrogothic kingdom was formed (489)

under Theodoric, whose rule extended from Dalmatia to the Atlantic. When Odoacer and Theodoric established their domination in Italy the Western Roman empire may be said to have come to an end, though the Eastern empire held on for many centuries afterwards, notwithstanding the continual invasions of other barbarians, such as the Hungarians and the Saracens.

Barbarossa. See FREDERICK I.

Barbarossa ('Red-beard'), HORUK (c. 1473-1518) and KHAIR ED-DIN, the name of two celebrated Turkish corsairs of the 16th century, born at Mitylene, on the island of Lesbos. Entering the service of the emir of Tunis, Horuk became commander of his fleet, and in 1515 made himself master of Algiers. He was defeated and slain by the Spanish general Gomarez near Oran in 1518. The war was continued by his brother Khair ed-Din, who, with Turkish help, seized both Algiers (1519) and Tunis (1533). Although routed near Tunis by the Emperor Charles v. in 1535, he maintained himself at Algiers, and was in the following year made chief admiral of the Turkish fleet by Sultan Solyman II. During the next ten years, until his own death in 1546, he was the terror of the Mediterranean, plundering Port Mahon (Minorca), the Ionian Is., Dalmatia, and Nice, and defeating the fleet of the emperor in the Gulf of Arta (1538), near Crete (1540), and off Algiers (1541). See La Gravière's *Doria et Barberousse* (1886); *Blackwood's Mag.*, vol. lii.

Barbaroux, CHARLES JEAN MARIE (1767-94), Girondist orator and politician, was born at Marseilles, where he practised as an advocate until the revolution, when he was sent to represent his native town in the Legislative Assembly at Paris. Here he attached himself to Brissot, Ver-

gniaud, and Gensonné, the most influential of the Jacobins, and discussed with Roland the possibility of a southern republic. He led the Marseilles battalion on Aug. 10, 1792, and was a Girondist deputy to the Convention. He denounced Marat and Robespierre, and sustained the appeal to the people in the sentence passed on the king. In consequence he was proscribed as a royalist (May 31, 1793), and had to flee from Paris. But he was captured and guillotined at Bordeaux (June 25, 1794). See *Mémoires relatifs à la Révolution*, ed. Boudouin (1822).

Barbary ('land of the Berbers'), an extensive region of N. Africa, stretching from Egypt to the Atlantic, and from the Mediterranean to beyond the Great Atlas, was variously known to the ancients as Mauritania, Numidia, and Africa Propria. Colonized by Mauri (Moors), Numidians, and Phoenicians, it reached its zenith under the Carthaginians, and was subject to the Romans from 146 B.C., from whom it was taken by the Vandals (429-533 A.D.). Then for a little more than a century it was subject in part to Byzantium; but during the 7th century it passed under the sway of the Arabs. The French secured possession of much of it in the second quarter of the 19th century. The Barbary States are Morocco, Algeria, Tunis, Tripoli, and Barka. See also BERBERS.

Barbary Ape (*Macacus inuus*), a macaque monkey, remarkable in that it is found on the Rock of Gibraltar and the opposite shore of Africa, while its allies are confined to Asia. It is the only monkey native to Europe in the living state, though they are abundant as fossils. At one time the ape population at Gibraltar was reduced to four; but the numbers were successfully reinforced from Africa, and the herd is now carefully protected.

in spite of the destruction which they effect in gardens and orchards.

Barbary Pirates. See ALGERIA and ALGIERS.

Barbastelle (*Synotus barbastellus*), a brown bat found in England, France, and Germany, the cheeks of which are covered with a beard, while the ends of the hairs are yellow.

Barbastro, tn., prov. Huesca, Spain, 27 m. on coach road E. by s. of Huesca, and on a branch railway from Saragossa to Barcelona. The ancient Aragonese Cortes was formerly held here. Pop. 7,000.

Barbault, ANNA LETITIA (1743-1825), English authoress, was born in Leicestershire. In 1773 she published her first volume of poems, which was instantly successful. In 1774 she married the Rev. Rochemont Barbault, with whom she kept a boarding school for twelve years at Palgrave in Suffolk. She edited (1810) the English novelists in fifty volumes, with biographical and critical notices; and also *The Female Speaker*, a selection of English prose and verse for young ladies. In conjunction with her brother, John Aikin, she began in 1792 the series entitled *Evenings at Home*. See *Memoirs* by Lucy Aikin (1826), Le Breton (1874), G. A. Ellis (1874), Miss Thackeray's *Book of Sibyls* (1883), and Murch's *Mrs. Barbault and her Contemporaries* (1877).

Barbecue (Haytian, *barbacoa*), a wooden or iron framework on which large pieces of meat or whole pigs or oxen were roasted; also a name given to the meat thus roasted, and now extended in the United States to an *al fresco* feast where meat is thus cooked. Another derivation is given as a corruption of the French *barbe-à-queue* (snout to tail). See also BUCCANEERS.

Barbed Wire Act, 1893.

Where barbed wire which 'may be injurious to persons or animals lawfully using a highway' adjoins a highway, the local authority may call upon the owner of the land to remove the wire; and if he fails to do so, may apply to a court of summary jurisdiction in England and the sheriff in Scotland; and if he still fails to remove it, may remove it themselves and recover their expenses. Apart from the act, a person may be liable in damages for injuries done by barbed wire to any one who is not a mere trespasser. For manufacture, see WIRE; for use in war, see FORTIFICATION.

Barbel, a general name applied to the very numerous species of a genus (*Barbus*) of Cyprinoid fishes. There are usually four barbels or processes on the upper jaw, and the third ray of the dorsal fin is usually elongated, ossified, and toothed. The common barbel of Europe (*B. vulgaris*) may reach a length of several feet, and, like its near ally the carp, buries itself in mud during winter. Its diet is very varied, including refuse of various kinds, and the flesh is almost inedible. Other species occur in the temperate and tropical regions of the Old World.

Barber (Lat. *barba*, 'a beard'), a beard trimmer and shaver, now also a hair-cutter. Formerly the barber added to his duties as hair-dresser that of surgeon, especially in simple cases such as blood-letting. The sign of the barber (a pole with spiral bands or bandages of red, and a pendent brass basin with a semicircular opening in its rim) symbolizes the old function of the barber—blood-letting. Barber-surgeons existed in France as a corporation from 1371 to the Revolution. See *Annals of the Barber-Surgeons of London* (1890).

Barber, the name applied in the Gulf of St. Lawrence to a strong wind that blows at times

loaded with ice particles of frozen fog. Driven by a high wind, these ice particles cut the face; hence the name.

Barberini, an Italian family of the 17th century, originally of Tuscan origin, whose greatness dates from the elevation of Maffeo Barberini (1568-1644) to the papal chair as Urban VIII. (1623). His brother Carlo and two of his nephews, Francesco and Antonio, were raised to the cardinalate; Taddeo, another nephew, was given the principality of Palestrina. Incensed by the growing avarice and power of the Barberini, the families of the Medici, Este, and Farnese waged war upon them (1641-4), and defeated them. Under Pope Innocent X. they were forced to flee to France, where Taddeo died (1647). The family became extinct in the male line in 1738. The valuable library collected by Francesco Barberini was sold to the Pope (Leo XIII.) in 1902, though not the great works of art preserved in the ancestral palace at Rome.

Barberino di Mugello, tn., Italy, 16 m. N. of Florence; manufactures hats. Pop. comm. 12,000.

Barberry, an ornamental evergreen shrub of the genus *Berberis*, natural order Berberidaceæ. Whether the common barberry (*Berberis vulgaris*) is or is not a native of Britain is open to some doubt. *B. vulgaris* is a thorny shrub which in early summer bears yellow, many-flowered, pendulous racemes. The flowers, on first opening, have a faint scent of cowslips, but this soon gives place to a smell as of putrefaction. The scarlet fruits afford a brilliant display in autumn, and their astringency was formerly made use of in medicine. The orange-yellow flowered *B. Darwinii*, the graceful, evergreen, box-leaved, yellow-flowered *B. dulcis* or *B. buxifolia*, the evergreen, long-leaved *B. japonica*, the yellow-flowered *B. aris-*

tata, with bloom-covered berries in autumn, the low-growing *B. Thunbergii*, with lovely autumn colouring of leaves and scarlet berries lasting well to Christmas, the slightly more delicate *B. nepalensis*, with its slender racemes of yellow flowers, and certain hybrids derived from them, are among the best shrubs for garden decoration. *B. Darwinii* and the evergreen *B. aquifolium* are extensively used as covert plants. The genus *Mahonia* is now included in the genus *Berberis*. The barberries do well in most garden soils, though the addition of leaf-mould and peat is usually desirable. The evergreen species are commonly somewhat more in need of shelter than are the deciduous kinds. Propagation is commonly effected by seeds sown when ripe in autumn, but barberries may also be increased by means of layers, or by cuttings taken in autumn and placed in light soil under glass. A yellow colouring matter used in leather manufacture is obtained from the roots. A fungus (*Accidium Berberis*) which attacks the plants has been proved to be a stage in the life of the red and black rusts of cereals.

Barberton, dist. and tn. in Transvaal prov., S. Africa, 136 m. by rail w. of Lourenço Marques; the centre of De Kaap gold fields. White pop. 2,400.

Barbet, the name given to the members of the Capitoninæ, a large sub-family of birds. The barbets are heavy and ungraceful, with large, swollen bills and bright plumage. The diet consists of fruits and insects, the birds being strictly arboreal in habit. They are found in tropical Asia, Africa, and America.

Barbette, in its naval sense a low, fixed armoured breastwork behind which the heavy armament of a ship is mounted, and over which it fires. The guns thus placed revolve on turntables

within, and their after-ends are protected by means of armoured shields. The first British iron-clad to be fitted with barbetstes was the *Téméraire* of 1876. After 1890 the barbette superseded the turret, a thickly armoured circular structure revolving on roller bearings around circular steel channels in the deck. The barbette differs from the turret in that a large part of the main protection is a fixture and forms part of the ship herself—a very great advantage. The guns are placed upon a revolving platform within the armour plates, which carries them round through their various arcs of bearing. Beneath the barbette chamber is a working chamber, 9 or 10 feet in height, which forms the intermediate position in the loading system. The working chamber and an ammunition hoist are attached to, and revolve with, the gun platform, so that the guns may be loaded at any point on the arc of training.

Barbey d'Aurévilly, JULES (1808-89), French author, born at St.-Sauveur-le-Vicomte (dep. Manche); wrote a great number of works characterized by the paradoxical boldness of his ideas and the brilliancy of his style. The best known are: novels—*Une Vieille Maîtresse* (1851), and *L'ensorcellée* (2 vols. 1854), one of his best works; critical studies—*Les Quarante Médailles de l'Académie Française* (1863), *Les Romanciers* (1866), *Goethe et Diderot* (1880), and *Les Œuvres et les Hommes du XIX^e Siècle* (12 vols. 1861-92). See Buet's *Jules B., Impressions et Souvenirs* (1891), and Grelé's *Jules B., sa Vie et son Œuvre* (1902).

Barbican, a word introduced during the crusades to describe an outwork to protect the entrance to a castle or fortified town; sometimes, also, an outpost communicating with the

town or castle, and commanding the flank of a besieging force. Examples of the former can still be seen at Alnwick and Warwick castles, and examples of both in the mediæval town of Carcassonne, France. The word survives in the name of The Barbican, a street in the city of London.

Barbier. (1.) ANTOINE ALEXANDRE (1765-1825), a French bibliographer, and librarian successively to the Commission of the Arts and Sciences (1793), Directory (1798), Council of State (1803), Napoleon (1807), and finally was administrator of crown libraries under the Bourbons until 1822. Of his publications the most important is his *Dictionnaire des Anonymes et Pseudonymes* (1806-1808; new ed. 1872-9, with suppl. 1889). (2.) HENRI AUGUSTE (1805-1882), a French author, of whose numerous works only one, a collection of satires called *Les Iambes* (1831; new ed. 1898), stands out by its literary merit and its scathing delineation of contemporary morals and manners. (3.) PAUL JULES (1825-1901), a French dramatic writer, whose pieces have been continuously before the Parisian public since 1847; more celebrated for his librettos for operas by Meyerbeer, Gounod, Thomas, and Massé than for his own plays, the chief of which are *Jenny l'Ouvrière* (1850), *La Loterie du Mariage* (1868), and *Jeanne d'Arc* (1873).

Barbieri. See GUERCINO.

Barbizon, hamlet, favourite residence of artists, dep. Seine-et-Marne, France, on the outskirts of the forest of Fontainebleau. Its fame is due to the Barbizon School (1840-75), an illustrious group of French artists—Corot, Millet, Diaz, Rousseau, Daubigny—and their followers. Characterized by a reaction against all pedantry and false romanticism, the work of Millet and Rousseau especially was the

result of a consistent and serious return to nature, and to the most sincere and immediate impressions of nature and life. See Thomson's *Barbizon School* (1891), which gives other authorities; and Breton's *Nos Peintres* (1900).

Barbou, a celebrated family of French printers. The edition (in italics) of Clément Marot (Lyons, 1539), the Cicero, also in italics (Limoges, 1580), and a charming collection, in 76 vols. 12mo, of Latin classics (Paris, 1753 ff.), are among their most famous work. The business passed in 1808 to the firm of Delalain, by whom it is still continued. Barbou editions are highly prized for their neatness and accuracy, rivalling the Elzevirs of earlier date.

Barbour, SIR DAVID MILLER (1841), British financier, went out early to India as a civil servant, and became member of council of the governor-general in 1887. In 1893 he was appointed a member of the Royal Commission on the Financial Relations of Great Britain and Ireland; in 1897, of the Sugar-growing Colonies of the West Indies; in 1900 he was sent to S. Africa as a special commissioner to inquire into the finances of the Transvaal and Orange River Colony; in 1903 he was chairman of the Royal Commission on London Traffic; and member of the Royal Commission on Shipping Rings (1907). He was made K.C.S.I. in 1889, and K.C.M.G. in 1899.

Barbour, JOHN (? 1316 - 95), Scottish poet, was archdeacon of Aberdeen in 1356. In 1372 he became clerk of the king's audit, and in 1374 one of the auditors of the exchequer. His fame rests on his heroic poem *The Bruce*, completed in 1375-6 (the best edition is that of Professor Skeat for the Scottish Text Society, 1894), detailing, in octosyllabic verse, the fortunes and adventures of Robert the Bruce and his com-

panion, Sir James of Douglas. It is notable not merely as one of the best examples of early Scottish literature, but for its fine exposition of the spirit of ancient chivalry, and for its portrayal of the nobler aspects of early Scottish patriotism. Other works attributed to him are fragments of a translation of *The Siege of Troy* and the *Legends of the Saints* (Scottish Text Society, ed. Metcalfe, 1887-96), and *The Buik of Alexander* (Bannatyne Club, 1831). See *Wallace and Bruce Restored* (1900), by J. T. Brown; *John Barbour, Poet and Translator* (1900), by George Neilson; and Barbour's *Bruce*, edited by W. M. Mackenzie (1909), with literary and historical introduction.

Barbuda, isl. in Leeward group, British W. Indies, 30 m. N. of Antigua, of which it is a dependency. It produces tobacco and sugar. Area, 75 sq. m. Pop. 800.

Barby, tn., dist. Magdeburg, prov. Saxony, Prussia, on the Elbe, 14 m. S.E. of Magdeburg. manufactures sugar, and carries on a river trade. Pop. 5,300.

Barca. See BARKA.

Barcarolle (Ital. *barcaruolo*, 'boatman'), a name given to songs or instrumental compositions imitative of the songs, which originated with the gondoliers of Venice.

Barcellona, prosperous tn. Sicily, prov. Messina, near the coast, 27 m. W.S.W. of Messina. has silk industries and sulphur baths (season, May to September). Pop. comm. 24,000.

Barcelona. (I.) Province, N.E. of Spain, in the centre of Catalonia; is the most populous and industrial province of Spain, having an area of 2,969 sq. m., and a pop. of over 1,000,000. It is mountainous, containing branches of the Pyrenees—e.g. the Sierra de Cadi (8,000 ft.) in the N., Sierra de Monseny (5,571 ft.), and Montserrat (4,058 ft.). The coast land-

are fertile, and agriculture is greatly developed, even in the mountainous parts, the chief products being cereals, wine, oil, fruit (especially nuts), and cork. The mountains are rich in minerals, such as iron, lead, salt. The province is noted for its industries and commerce, the chief branches of manufacture being wool, cotton, lace, silk, cutlery, glass, and flour. (2.) Town and seapt. on the Mediterranean, cap. of the above province, 440 m. by rail E.N.E. of Madrid; is the chief industrial and commercial city and port of Spain. It lies in the form of an amphitheatre, has a pleasant climate, and is one of the prettiest towns in Spain. Its principal street, the Rambla, is one of the finest thoroughfares in Europe. It begins at the imposing Columbus monument near the harbour, and ends at Plaza de Catalüna, a favourite promenade. There are a cathedral in the Gothic style (built 1298-1448), and another beautiful church, also in the Gothic style (the Santa Maria del Mar, built 1328-83); the university (founded in 1430), with over 2,000 students; a naval institute; commercial school; academy of arts; the Lyceum Theatre; several large libraries, with rich collections of MSS.; and the archives of Aragon, with documents from 844. Barcelona is the seat of a bishop. There is a good harbour (300 ac.), easy of access. Barcelona played a great rôle in Mediterranean commerce in medieval times. Here the famous sea-laws known as the 'Consulate of the Sea' were in all probability promulgated in 1279. It is in connection with this port, too, that we find the first mention of marine insurance. About 4,000 vessels with a tonnage of 4,000,000 enter the port yearly. The chief manufactures are cotton goods, silks, woollens, paper,

and glass. The principal exports are iron, copper, cork, fruit, salt, and wines. The total trade is valued at an annual average of 36 millions sterling, of which about 50 per cent. are exports. Pop. 700,000. Barcelona was founded by the Carthaginian Hamilcar Barca about 230 B.C. It became a Roman colony under the name of *Faventia* in 200 B.C.; was conquered by the Goths in 415 A.D., and by the Moors in 713; and was from 762 capital of the independent county of Barcelona. In 1137 the county was united with Aragon. On several occasions it endeavoured, but unsuccessfully, to separate from Spain, and in 1640 it was the centre of the revolt against Philip IV. The town was bombarded and taken by the Duke of Berwick (1714), by the French general Duhesme (1809), and again by the French, after a long siege, in 1823. In more recent times Barcelona has been the centre of repeated Carlist, separatist, and republican movements, of labour riots, and anarchical outbursts, such as preceded and followed the execution of Dr. Ferrer in 1909. (3.) Town, Venezuela, formerly a state cap., now declining and largely in ruins. A railway runs to the port of Guanta, 12 m. E. Pop. about 9,000.

Barclay, ALEXANDER (?1475-1552), poet and translator, supposed, on good grounds, to have been a native of Scotland. He became a 'prest and monke of Ely,' and subsequently a Franciscan at Canterbury. His fame rests on *The Shyp of Folys of the Worlde* (1509), printed by Pynson, which was partly a translation and partly an imitation of Sebastian Brandt's *Narrenschiff* (1494). He wrote also *The Myrroure of Good Manners* and some *Eclogues*, the first pastoral poems that appeared in English proper. He also translated Sallust's *Jugurthine War*

Barclay

and a French poem, *The Castle of Labour*. The best ed. of *The Ship of Fools* is that of T. H. Jamieson (2 vols. 1874), which gives a full account of Barclay and his works.

Barclay, JOHN (1582-1621), Scottish satirist, author of the *Argenis*, was the son of a French lady of distinguished birth. He wrote much in Latin verse, satirizing royal and other high personages of his time. The *Satyricon* (1603-5) was his first effort; the *Argenis* (1621, new ed. by Waltz, 1891), his masterpiece; his last—a political allegory, containing allusions to the state of Europe. See Jules Dukas's *Etude Bibliographique sur le Satyrikon de J. B.* (1880), and Dupond's *L'Argenis de Barclai* (1875).

Barclay, JOHN (1734-98), founder of the Scottish sect of the Bereans (see Acts 17:11), otherwise called Barclayites, was the son of a Perthshire farmer. He became assistant minister of Fettercairn, Kincardineshire (1763), where his preaching drew large attendances; but his heterodoxy led to his deposition by the church courts. He formed a congregation of his own, which grew into a separate sect. From 1773 till his death he ministered to the Berean Church in Edinburgh. See Memoir attached to his *Works* (1852).

Barclay, JOHN (1758-1826), anatomist, nephew of the above, was licensed for the ministry, but turned to medicine (M.D. Edin. 1796). He gave special attention to anatomy and surgery, on which he lectured in Edinburgh. He left at least two sound and learned works—*Description of the Arteries of the Human Body* (1812), and *Inquiry into Opinions concerning Life and Organization* (1825). His collection of anatomical subjects now forms the Barcleian Museum in the Royal College of Surgeons, Edinburgh. See *Memoir* by Waterhouse (1843).

Barclay, ROBERT (1648-90), Scottish Quaker and writer, was born at Gordonstown, Morayshire. Educated at Paris in the Scots College, of which his uncle was rector, he returned to Scotland in 1664, and soon joined the Society of Friends, in whose defence he wrote *Truth Cleared from Calumnies* (1670), *Treatise on Universal Love* (1677), and *Apology for the True Christian Divinity, as the same is held forth and preached by the People called in scorn Quakers* (1678). Barclay suffered considerable local persecution in Aberdeen, where he astonished the inhabitants by walking (1672) through the streets in sackcloth and ashes (see Whittier's *Poems*). He took part in founding E. New Jersey (1682) as a Quaker settlement, of which he was appointed governor, although he never went to America. See *Lives* by J. G. Bevan (1802) and by W. Armistead (1850).

Barclay - Allardice, ROBERT (1779-1854), of Urie, pedestrian, generally known as 'Captain Barclay,' entered the British army in 1805, and served in the Walcheren expedition of 1809. He is remembered chiefly for his pedestrian feats, the most notable of which was his walking 1,000 miles in as many consecutive hours, at Newmarket, in 1809. See Walter Thom's *Pedestrianism* (1813), and *Gent. Mag.* (new series), vol. x.

Barclay de Tolly, MICHAEL PRINCE (1761-1818), a celebrated Russian general, was a descendant of a branch of the same Barclay family (Barclay of Tolly, or Towill in Aberdeenshire), as that to which Barclay the Quaker belonged, which had settled in Livonia. He took part in the campaigns against Turkey (1788), Sweden (1790), Poland (1792 and 1794), France (1806) and Finland (1808); was minister of war in 1810, an office which he held, with a few months' interval, until 1813. But his fame as

general rests upon the successful part he took in the opposition to Napoleon's advance into Russia in 1812. He led the Russian contingent of the allies at Leipzig (1813) and at Paris (1815).

Bar-cochba, SIMON ('Son of the Star'—Num. 24:17), Jewish impostor, leader of the revolt of the Jews against the Roman domination during the reign of the Emperor Hadrian (131–135). At first Bar-cochba, who claimed to be the Messiah, was successful, taking Jerusalem (132) and more than a thousand towns and villages from the Romans. But Hadrian sent Julius Severus from Britain to Syria, and the revolt was quelled. Severus retook Jerusalem, and utterly destroyed Bar-cochba and his army at Bether (135). See Schwarz's *Der Bar-Kochbaische Aufstand* (1885).

Bard, one of an ancient Celtic order, whose province it was to celebrate in verse, song, and play the great actions of heroes and men of dignity. They flourished especially in Wales, and in the 6th century mention is made of the Welsh bards Taliesin, Aneurin, and Llywarch; but the history of the order is obscure until the 10th century, when it was reconstituted by King Howel Dha. In course of time the order became hereditary, and was regulated by laws enacted about A.D. 1000. Edward I. is credited with the hanging of all the Welsh bards, because he regarded them as promoters of sedition; but they were revived by the Tudors. They were especially active in recasting and adding to the Arthurian cycle. In Ireland they were divided into three classes—those who sang of war and religion, those who dealt with genealogy and family history, and those who chanted the laws. Many districts in the Highlands still retain the name of the bard's territory, and the second title of the Athole family,

'Tullibardine,' is taken from the lands appropriated to a bard. In Wales some attempts have been made towards the revival of bardism by means of the popular Eisteddfods. In modern usage the term signifies a poet, as the 'bard' of Avon (Shakespeare), the Ayrshire 'bard' (Burns). See Eastcott's *Sketches of the Origin, Progress, and Effects of Musick, with an Account of the Ancient Bards* (1793); Evans's *Specimens of the Ancient Welsh Poetry* (1764); *Myvyrian Archaiology of Wales*, ed. Jones, Williams, and Owen (new ed. 1862); Douglas Hyde's *Literary History of Ireland* (1899); and D. D. Evans's *Ancient Bards of Britain* (1906). See EISTEDDFOD.

Bardesanes = BAR-DAISAN (A.D. 154–222), a Syrian of Edessa, Mesopotamia, founder of a sect of Gnostics known by his name, who held peculiar views as to the origin of evil, which they regarded as independent of God, and only of temporary existence. They also believed that the body of Jesus was not real flesh and blood, but only appearance. Bardesanes taught these doctrines through 150 hymns, which were in use in the Catholic Church until the 4th century. See Smith and Wace's *Dict. of Christian Biography*.

Bardi, comm., Italy, prov. of and 30 m. s. of Piacenza. Pop. 7,600.

Bardili, CHRISTOPH GOTTFRIED (1761–1808), German philosopher, born at Blaubeuren, in Würtemberg, was a strong opponent of the doctrines of Kant. His theories, known as rational realism, had little influence in Germany. They anticipated in certain respects the doctrines of Schelling and Hegel. Of his numerous works the *Grundriss der ersten Logik* (1800) is the chief.

Bardowiek, a small town of Prussia, prov. Hanover, 5 m. N.

of Lüneburg; was a large and important trading town in the time of Charlemagne, but was destroyed by Henry the Lion, Duke of Saxony, in 1189. Pop. 2,000.

Bardsey ('Bards' Island'), isl., co. Carnarvon, Wales, s. of Braich-y-pwll, the legendary last retreat of the Welsh bards; has a lighthouse (fixed light, seen 17 m.), and is accessible only on the s.e. side. Pop. 120.

Bardwan, or **BURDWAN**. (1.) Dist., Bengal, India; area, 2,689 sq. m. It is flat, and watered by the Bagirathi and other tributaries of the Hugli. Rice is the principal agricultural product. Gold, silver, and brass wares, silk saris and dhutis, are the chief manufactures. Raniganj, a subdivision of Bardwan, has important coal mines. Pop. 1,530,000.

(2.) Principal tn. of the dist., situated on the l. bk. of the Damodar R., 55 m. n.w. of Calcutta by rail. Pop. 35,000.

Barebone's Parliament (July 4 to Dec. 12, 1653), an assembly summoned by Cromwell after the 'Rump' had been expelled, was so called in derision after one of its prominent members, Praise-God Barbon or Barebone, a leather-seller of Fleet Street. It consisted of 139 members (122 for England, 6 for Wales, 5 for Scotland, and 6 for Ireland). On the accession of Charles II. Barebone spent some time in the Tower. He was not a lunatic, as some describe him, and many of his suggested reforms have since been adopted. See S. R. Gardiner's *Hist. of the Commonwealth and Protectorate* (1897). See **LONG PARLIAMENT** and **CROMWELL**.

Barefooted Monks and Nuns, certain reformed branches of the great monastic orders which adopted the habit to indicate the lowliness of their members. The chief branches are the Alcantarines, a division of the Franciscans, founded by St. Peter of Alcantara

on the Tagus (1555); the Barefooted Carmelites, founded (1568) by St. Theresa in the convent of Avila, Spain, which included both monks and nuns; and the Barefooted Augustinians (1588). The nuns of 'Our Lady of Calvary' go barefoot for a season only. See *Santa Teresa*, by Mrs. Cunningham-Graham.

Barège, a gauze-like fabric used for women's dresses, made of silk and worsted, or of cotton and worsted. Called in France *crêpe de Barèges*, after the Pyrenean watering-place of that name, it is really produced at Bagnères-de-Bigorre, 16 m. distant.

Barèges, summer health resort (uninhabited in winter), dept. Hautes-Pyrénées, S. France, 25 m. s. of Tarbes, and reached by coach from Pierrefitte (12 m. away). Its hot sulphur springs (89½°-113° F.) are famous.

Bareilly, chief town and municipality, Rohilkhand Division, United Provs. of Agra and Oudh, India, about 150 m. E. of Delhi. It manufactures furniture and carriages, superior cotton and silk cloth, and leather and metal work. Pop. 130,000.

Barents. (1.) ISLAND, in Spitzbergen group, 78° 30' N. and 20° E. of Arctic regions, between Edge L. and W. Spitzbergen; named after Willem Barents, a Dutch navigator; highest point, 1,998 ft. (2.) B. SEA, div. Arctic Ocean, between Spitzbergen (w.) and Novaya Zemlya (e.) It is shallow (aver. depth, 100 fathoms), and in the N. is beset with pack ice. The s. part is open even in winter. The part near the Kola coast is sometimes known as the Murman Sea. See Nansen's *The Norwegian North Polar Expedition*, vol. iii. (1902).

Barents, **WILLEM**, a Dutch navigator, born in the island of Terschelling about the middle of the 16th century; died at Novaya Zemlya, 1597. Barents acted as pilot of three unsuccessful ex-

peditions from Holland (1594-6) to discover the N.E. Passage. In the third he discovered Spitzbergen, doubled the N.E. cape of Novaya Zemlya, and there died. In 1871 the Norwegian, Captain Carlsen, came upon Barents's winter quarters, and in 1875 Captain Gardiner recovered part of his journal. See Van Campen's *Barents Relics* (1877), and Gerrit de Veer's *The Three Voyages of W. Barents* (2nd ed. 1876).

Barère de Vieuzac, BERTRAND (1755-1841), French journalist and revolutionist, was a native of Gascony. He became deputy to the National Assembly in 1789, a delegate from the Hautes-Pyrénées to the National Convention in 1792, and a member of the Committee of Public Safety. He voted for the king's death 'without appeal.' His flowery language induced Burke to call him 'the Anacreon of the guillotine.' (See also Carlyle's *French Revolution*, bk. v. ch. 6). When the Jacobins triumphed over the Girondists, Barère was the first to propose that 'terror should be the order of the day,' but was himself impeached and imprisoned in 1795 in the Prison de Saintes, where he began to edit his *Mémoires*. He escaped, and eventually took refuge in Belgium. After the revolution of 1830 he returned to Paris, where he was again elected a deputy for his department. His *Mémoires*, so called, in 4 vols., appeared in 1842, and an English trans. by Payne, also in 4 vols., containing a long 'historical notice' of Barère, was published in 1896. See Macaulay's *Essay on Barère* (1875); Carnot's *Mémoires de Barère de Vieuzac* (1842).

Baretta. See BIRETTA.

Baretti, GIUSEPPE (1719-89), Italian poet and critic, born at Turin. In 1751 he came to London, where he became secretary of the Royal Academy of Painting, and

made the acquaintance of Johnson, Garrick, and Boswell. His most important work, which was epoch-making for Italian literature, is *Frusta Litteraria*, a journal of literary criticism, in which he sharply combated the morbid spirit of his time, and laid down sound principles of criticism. It was published in Venice from 1763-5 in 33 numbers, reprinted, most recently in the collection *Classici Italiani del Secolo XVIII.* (2 vols. 1838-9). The attacks to which he exposed himself by this publication compelled him to return to London. To Englishmen he is best known as the author of a *Dictionary of the English and Italian Languages* (1760; new ed. 1873), long a standard work of reference. See his *Scritti Scelti*, ed. with biography by Custodi (1822-3), Piccioni's *Studi e Ricerche intorno a G. Baretti* (1899), Garizio's *G. Baretti e i suoi Tempi* (1872), and *Life* by Lacy Collison-Morley (1909).

Barfleur (anc. *Barofluctum*), bathing-place, dep. Manche, France, on N. coast, 15 m. E. of Cherbourg, with tidal harbour at Pointe de Barfleur, the N.E. cape of the Cotentin peninsula. It was an important port during the middle ages. Edward the Confessor embarked here in 1042 for England, and the *White Ship* left this port in 1120 on its disastrous voyage. Pop. 1,200. The BATTLE OF BARFLEUR was fought on May 19, 1692, by a fleet of 82 British and Dutch ships of the line, under Admirals Edward Russell and P. van Almonde, and a French fleet of but 44 ships of the line, under Comte de Tourville. The latter engaged in battle against his better judgment, but displayed remarkable ability, and got away in a fog. He was, however, chased by the allies on the 20th and 21st, and was finally driven with the bulk of his force into the Bay of La

Hogue. Some of the ships which had entered the Bay of La Hogue escaped thence: but 12 still remained there on the 23rd, and on that and the following day all of them were destroyed by the English and Dutch, under the eyes of King James II., who had hoped that Tourville's fleet would be instrumental in winning back for him the throne of England. The victory was of vast importance, but more reputation, perhaps, was gained by Tourville than by the men who defeated him. See Clowes's *The Royal Navy* (1897); *Annuaire Bulletin de la Société de l'Histoire de France* (1877).

Barfod, PAUL FREDERIK (1818-1896), Danish historian, assistant in the Royal Library in Copenhagen in 1866, was an ardent advocate of the 'Scandinavian idea' or close union of the three Scandinavian kingdoms. His chief works are *Fortællinger af Fædrelandets Historie* (4th ed. 1872-4), and *Danmarks Historie, 1319-1670* (6 vols. 1885-93).

Barfrush. See BALFRUSH.

Barga, comm., Italy, prov. of Pisa, and 16 m. N. of Lucca. Pop. 8,000.

Bargain and Sale. (1.) As to LAND, this was an old method of conveying land, and is now obsolete. A 'bargained' to sell land to B, and the 'sale' was completed by payment of the purchase money. The Statute of Uses (1535) enacted that the effect of the combined transactions should be to convey the legal as well as the equitable estate to B, without the necessity for livery of seisin. Another statute of the same year required every bargain and sale of a freehold estate to be by deed enrolled, and to evade this requirement it became usual to bargain and sell a lease for a year only, and then to release the possession so obtained. This method of sale, known as a lease and release, remained in use

till 1841. (2.) As to PERSONAL PROPERTY, a bargain and sale is a completed contract for the sale of specific goods. See FEOFFMENT.

Bargander. See SHELDRAKE.

Barga Pass, pass in Himalayas, Bashahr State, Punjab, India, 31° 16' N., 78° 19' E.; alt. 15,000 ft.

Barge, tn., prov. Cuneo, Piedmont, Italy, 28 m. S.W. of Turin; has slate quarries and a manufactory of arms. Pop. (comm.) 10,000.

Barge, flat-bottomed boat for carrying freight on rivers and canals, or for loading and unloading ships (lighters). Canal and river barges have usually accommodation for the bargee and his family. The conditions of life on board barges and the education of the children living on them were investigated by George Smith of Coalville, and his efforts led to the Canal Boats Act of 1878, amended in 1884, by which all canal boats must be registered under the name of a place where there is a school for the children to attend. Moored barges are frequently used as house-boats. The long, double-banked boats used by flag-officers, and the elegant, adorned and appointed state craft manned by many oarsmen, are also known as barges. Some barges are now operated by steam; and towage by electric motors running on ropeways or rails beside the canal has also been experimented with successfully.

Barge-board, or VERGE-BOARD, is the inclined projecting board placed on the gable end of a house or on a window to hide the horizontal timbers of the roof, and to preserve them from the weather. It has been used from the 13th and 14th centuries; ancient specimens were elaborately carved and fretted. See Pugin's *Details of Ancient Timber Houses* (1836).

Barh, munic. tn., Patna district, Bengal, India, situated on the S.W. bk. of the Ganges, 31 m. S.E. of Patna. Pop. 12,000.

Barham, SIR CHARLES MIDDLETON, LORD (1726-1813), British admiral, controller of the navy from 1778 to 1790. Although he became a vice-admiral in 1793, and a full admiral in 1795, he never hoisted his flag afloat. In 1794-6, however, he served as a junior lord of the Admiralty. He was created Baron Barham in 1805, when he became First Lord of the Admiralty.

Barham, FRANCIS FOSTER (1808-71), born near Penzance, attempted to form (1840-4) a new religion, which he called 'Alism.' He edited Jeremy Collier's *Eccles. Hist. of Great Britain* (1840).

Barham, RICHARD HARRIS (1788-1845), author of the *Ingoldsby Legends*, was born at Canterbury, took orders (1813), and in 1821 was appointed a minor canon of St. Paul's. The *Ingoldsby Legends* were published in *Bentley's Miscellany*, under Dickens (1837), and collectively (1840). See *Life* by his son (1870; 4th ed. 1899).

Bar Harbor, vil., Mt. Desert I., Hancock co., Maine, U.S.A.; has become a fashionable summer resort with a large cottage colony. In the vicinity are Green Mt., Newport Mt., and the beautiful Eagle lake. Pop. about 2,000.

Bar - Hebræus. See ABUL-FARAJ.

Barhiya, tn., Behar, India, 50 m. S.E. of Patna. Pop. 15,000.

Bari. (1.) Or BARI DELLE PUGLIE ('Bari of the Apulias'), prov., S. Italy, forming part of the Apulian plain, on the Adriatic seaboard. The coast plain produces fruits in abundance, cattle and sheep are pastured on the limestone plateau of Murgie, and there is a salt industry on the shore. Area, 2,065 sq. m. Pop. 900,000.

(2.) Anc. *Barium*, cap. of the above, seapt. and archi-episcopal see, on the Adriatic, 69 m. by rail N. by W. of Brindisi; has large trade in wine, olive oil, almonds, carob beans, and cream of tartar.

The total trade is valued at about £4,000,000 per annum. The Byzantine cathedral of San Sabino (1027-34) and the church of San Nicola (1087) are the most notable edifices, the former having paintings by Tintoretto and Paul Veronese. Pop. 90,000. (3.) District of Uganda, in the extreme N.W. of the protectorate, bounded by the Nile on the W., and by the Tu on the E. (4.) A formerly powerful negro tribe on the White Nile, Africa, between the districts of Madi and Gondokoro (4° and 6° N.). Their language is allied to that of the Dinka. See Friedrich Müller's *Die Sprache der Bari* (1864).

Bariatinski, ALEXANDER IVANOVICH, PRINCE (1814-79), Russian military commander, remembered for his campaigns against Shamyl, chief of the Tcherkesses, whom he captured in 1859.

Bari Doab, tract of country in the Punjab, India, lying between the Ravi on the N.W. and the Beas on the S.E. An important canal waters the N.E.; it was completed in 1860.

Barili, tn., Cebu prov., Visayas, Philippines, 2 m. from the S.W. coast. The fisheries are important, and there is trade in silk fabrics, hemp, pina cloth, and cotton. Pop. 32,000.

Barilla, the ash, containing about 20 per cent. of sodium carbonate, of certain plants that grow near the sea, principally in Spain. Until the introduction of the Leblanc soda industry the production of barilla was of some importance. Its principal use was in making glass and soap, but it is now superseded by sodium carbonate, made from common salt.

Barima River. See BRITISH GUIANA.

Barine, ARVÈDE (1840), French writer, whose real name is Mme. Cécile Vincens, born in Paris; writes chiefly about women, but has translated Tolstoy's *Souvenirs* (1886). She is the author of *Por-*

traits de Femmes (1887; 3rd ed. 1902), *Essais et Fantaisies* (1888), *Princesses et Grandes Dames* (1890; 6th ed. 1902), *Bernardin de Saint-Pierre* (1891), *Alfred de Musset* (1893; 3rd ed. 1900), and *Louis XIV. et la Grande Mademoiselle, 1652-1693* (1905).

Baring. The commercial and financial house of Baring Brothers and Co. was founded in 1770 by Francis and John Baring, sons of John Baring, a German who settled in England early in the 18th century. SIR FRANCIS BARING (1740-1810), the Francis Baring just mentioned, an active politician and financier, was a supporter and friend of Pitt, who created him a baronet (1793). His eldest son, SIR THOMAS BARING (1772-1848), who succeeded him, devoted himself to collecting works of art. ALEXANDER BARING (1774-1848), his second son, was raised (1835) to the peerage as Lord Ashburton. CHARLES THOMAS BARING (1807-79), grandson of Sir Francis Baring, was bishop of Gloucester and Bristol (1856), and of Durham (1861). SIR FRANCIS THORNHILL BARING (1796-1866), son of Sir Thomas, was Liberal member for Portsmouth from 1826-65. He was successively a lord of the Treasury (1830-4), secretary to the Treasury (1835-9), Chancellor of the Exchequer (1839-41), and First Lord of the Admiralty (1849-52). In 1866 he was raised to the peerage as Baron Northbrook, and was succeeded by his son, THOMAS GEORGE, second Lord Northbrook (1826), who was viceroy of India (1872-6) and First Lord of the Admiralty (1880-5). He was created Earl of Northbrook (1876). THOMAS BARING (1799-1873), son of Sir Thomas Baring and uncle of the present Earl of Northbrook, was Chancellor of the Exchequer (1852, 1858). EDWARD CHARLES BARING (1828-97), grandson of Sir Francis Baring, was created

Baron Revelstoke (1885). In 1886 the firm became seriously embarrassed, but managed to tide over the crisis. See BANK. For EVELYN BARING, see CROMER LORD.

Baring-Gould, SABINE (1834-1913), English divine, novelist, and miscellaneous writer, born at Exeter, and became incumbent of Dalton Thirsk, in 1866, rector of E. Mersea, Essex, in 1871, and in 1881 rector of Lew Trenchard, Devon. His first important book was the *Curious Myths of the Middle Ages* (1866-7). This was followed by *The Origin and Development of Religious Belief* (1869-70), and by *The Lives of the Saints*, a laborious work in 15 volumes (1872-7; new ed. 1897), which was placed on the Roman *Index Expurgatorius*. Of his many novels, *Mehalah* (1880), *Richard Cable* (1888), *Cheap Jack Zita* (1893), and *The Broom Squire* (1896) are perhaps the best. He has written a few hymns, including the popular 'Onward! Christian soldiers' and 'Now the day is over;' and he is the author of the fine rendering of Ingemann's Danish hymn, 'Through the night of doubt and sorrow.' He is a very versatile author, having published sermons, books on Germany, fairy tales, *In Troubadour Land* (1890), *The Tragedy of the Caesars* (1892), *A Book of Dartmoor* (1900), *Brittany* (1902), *A Book of N. Wales* (1905), *A Book of the Riviera* (1905), *A Book of the Cevennes* (1908), *Cornish Characters* (1909), and *Cave Castles of Europe* (1911).

Baringo. (1.) Lake in British E. Africa, its western shore nearly touching 36° E., and at its southernmost point only 30' N. of the equator, standing 3,300 ft. above the level of the sea (Pringle), 10 m. long from N. to S. by 10 m. broad; without outlet; in the centre of the meridional rift, the greater part of the drainage of which enters this lake. The water

is fresh, and abounds in fish. (2.) District of Uganda, including the lake mentioned above.

Barisal, tn. in Bakarganj dist., Bengal, India, 70 m. s. of Dacca. Pop. 19,000.

Barito, riv. (drainage basin estimated at 38,000 sq. m.) in Dutch Borneo, E. Indies, flows s. for 500 m., and enters the Java Sea below Banjermassing.

Baritone, the male voice intermediate between the bass and the tenor. Its compass is from about A on the first space of the bass clef to the F above the stave. The quality of voice should suggest a high bass rather than a low tenor. See VOICE and VOICE TRAINING.

Barium (Ba, 137.4) is a metallic element first obtained by Sir Humphry Davy in 1808, but found only in combination, chiefly in heavy spar and witherite. It is probably a white metal, harder than lead, easily tarnished and acted on by water. In its chemical properties it closely resembles calcium. Barium oxide, or baryta, is obtained by strongly heating the nitrate or carbonate. It is a grayish-white powder, infusible except by the heat of the electric arc, strongly alkaline and caustic, and when added to water it slakes like lime, with formation of the hydroxide. Barium peroxide is obtained by heating the oxide in oxygen or air. When further heated to bright redness, or under reduced pressure, the oxygen is again evolved; this reaction is utilized in the Brin's process for making oxygen commercially. Barium chloride is prepared by dissolving native witherite in hydrochloric acid and crystallizing. Barium sulphate, 'permanent white,' or 'blanc fixe,' is prepared by adding sulphuric acid to barium chloride. Barium nitrate and chlorate are used in pyrotechny in the production of green fire, and the sulphide

(Bolognian phosphorus) phosphoresces after exposure to light. Most barium salts are exceedingly poisonous. Barium compounds may be detected by their imparting a green colour to a bunsen flame if volatile, or if in solution by the formation of an insoluble white precipitate on addition of sulphuric acid.

Bar-jesus, nicknamed ELYMAS, a Jewish sorcerer and false prophet, who was smitten with blindness for withstanding Paul when he preached before the Roman proconsul, Sergius Paulus, at Paphos (Acts 13:6-12).

Bark of trees is, in its popular sense, everything outside the wood of the stems and branches. The outer portion of the rind consists of epidermis and green cortex, but the inner portion is pale coloured and fibrous; this forms the 'bast' region. The 'cambium' layer, which forms a new ring or cylinder of wood each year, adds to the thickness of the bast inside the bark. In the first or second year of growth a cylinder of cells, usually in the cortex, but sometimes in the epidermis, becomes an outer cambium, known as the 'cork cambium' or 'phellogen.' Cork is thus the outside tissue of most trees, and from the time it appears the rind is called 'bark.' It shows numerous horizontal channels, composed of loosely attached cells; and through these paths, called lenticels, air and moisture pass out and in during the growing season: in winter, however, the last-formed autumn cells in the innermost layers of the lenticels remain firmly attached, like the ordinary cork cells, and render the passage impervious. In spring these special cells again separate, and allow the lenticels to resume their function. As tree trunks grow old the outer cork cells die—indeed, they die soon after they are formed by the phellogen; and as the girth

increases so does the pressure on the bark: the outer cork, therefore, often cracks, but the inner layers have greater elasticity, and remain complete. Each tree has its peculiar colour and type of bark. The cork of commerce is derived from a species of oak, *Quercus suber*, which grows extensively in the S. of Europe and in the N. of Africa. The trees are stripped every eight or ten years, and each successive crop of bark is better than the preceding one. In spite of the periodical removal of its bark, the *Q. suber* flourishes for over one hundred and fifty years. The *Q. suber* and other oak trees are very rich in tannic acid, and for this reason oak bark is employed by tanners in the preparation of leather from raw hide. It is utilized also as a mordant for certain dyes. The bark of many trees other than oak contains tannic acid—e.g. that of acacias and willows. More important still is the employment of the bast fibres of various plants in the textile arts. Thus flax (*Linum*), hemp (*Cannabis*), and jute (*Corchorus*) consist of the tough flexible fibres of the endophloeum, or inner bark, of the plants from which they are derived. With the exception of cotton, which is produced from the seed hairs of *Gossypium*, all the vegetable fibres used in the textile industries are derived from the bast region. Another great and increasing industry which depends on a bark product is the manufacture of india-rubber and gutta-percha goods. These juices are found in greatest amount in the lactiferous vessels of the middle layer (mesophloeum) of the bark of many trees belonging chiefly to the natural orders Euphorbiaceæ and Sapotaceæ.

In the lactiferous vessels of other plants numerous gums, pigments, resins, balsams, and oils are found, many of them possessing

great medicinal value. Cinchona is still known as 'Jesuits' bark,' having been brought to Europe from Peru by Jesuit missionaries. Of the numerous other drugs obtained from the cortical region of various plants, the following are in most common use: hamamelis, salicin, quassia, quillaia, eucalyptus, copaiba, the balsams of Peru and Tolu, myrrh, tragacanth, cascara, cinnamon, cassia, and angostura.

Barka, or BARCA (anc. *Cyrenai-ca*), a Turkish vilayet, N. Africa, bounded on the E. by Egypt, and on the W. by Tripoli and Gulf of Sidra, extends to the Libyan Desert in the S. It is for the most part a desert plateau, loftiest towards the sea, and possessing fertile tracts along the N. and E. In the N. and W. pine, olive, and date trees grow in abundance. The most important oases are Aujila and Jalo. Several caravan routes (ostrich feathers from Wadai and fruits from the interior) cross it to the seaports of Derna and Bengazi. In the time of the Ptolemies it was called Pentapolis, from the five large Greek cities of Berenice (now Bengazi), Arsinoë, Barca, Cyrene, and Apollonia. Numerous ruins of the same period are scattered all over the country. Sponge fishing on the Mediterranean coast is an important industry. The population is largely nomadic in the interior. The capital is Bengazi. Area, about 70,000 sq. m. Pop. (1900) about 300,000.

Bark Beetles, insects belonging to the family Bostrychidæ, of the order Coleoptera, and remarkable, in spite of their small size, for their destructive powers. All attack wood, on which they live, and which may be completely riddled by their burrows. Thus *Bostrychus typographus*, or the printer, a beetle very common in Germany, bores a hole through the bark of a pine tree, and lays

numerous eggs in recesses radiating from the central hole. From these eggs larvæ hatch out, which excavate radiating tunnels beneath the bark, so as to produce regular figures. At the end of these tunnels the larvæ pupate, and ultimately the perfect beetle bores its way through the bark and escapes. See Ormerod's *Injurious Insects* (1901).

Barker, EDMUND HENRY (1788-1839), translator of the classics, was born at Hollym, Yorkshire. After his marriage he lived at Thetford in Norfolk, and there edited many of the works of the Greek and Latin authors. See *Memoir in Literary Anecdotes of Person*, vol. i. (1852).

Barker, ROBERT (1739-1806), artist, born at Kells, in Ireland, came to Edinburgh, where he worked as a portrait and miniature painter. He was the inventor of panoramas, the chief of which were those of Edinburgh (1789) and London (1794), the battles of Trafalgar and Aboukir, and the fleet at Spithead.

Barker, THOMAS (1769-1847), artist, styled 'Barker of Bath,' and known for his pictures, *The Woodman* (engraved by Bartolozzi) and *Old Tom*, and his huge fresco, *The Inroad of the Turks upon Scio*.—**THOMAS JONES** (1815-82), his son, also an eminent artist, a pupil of his father and of Horace Vernet. His works include *The Meeting of Wellington and Blücher* (1851), *Nelson on Board the San Josef*, and other military pictures.

Barker's Mill, so called after its inventor, is the simplest form of hydraulic engine, or prime mover, and is analogous to the scolipile, the pressure of a head of water being used instead of the pressure of steam. The water is conducted into the hollow vertical axle, from which two or more horizontal radial pipes project, with their ends bent round tangentially in the same

direction. The pressure of the escaping water upon the bent pipes causes the machine to rotate in the opposite direction.

Barking, munic. tn., Essex, England, near London, with factories and vegetable gardens. It has all the usual public buildings and institutions. The church of St. Margaret is noteworthy, and a few ruins of Barking Abbey remain. Pop. 30,000. See Tuck's *Ancient Barking* (1900).

Barkly, SIR HENRY (1815-98), British colonial governor; M.P. for Leominster (1845-8); governor of British Guiana (1848-53), Jamaica (1853-6), Victoria (1856-63), Mauritius (1863-70), and the Cape (1870-77), where, in 1870, he acted as high commissioner in the settlement of the eastern frontier. See Theal's *Hist. of S. Africa*.

Barkly East, dist. and tn. of Cape of Good Hope, 85 m. E. of Burghersdorp. Pop. (dist.) 8,000.

Barkly West, dist. and tn. in Griqualand W., Cape of Good Hope, in the diamond-field country, 25 m. N.W. of Kimberley, on the N. bank of the Vaal R. At one time the most important trading centre of Griqualand W. Pop. tn., 1,000; dist., 17,000.

Barkul, tn. in the E. of Zungaria, Central Asia, 250 m. E. of Urumtshi, on one of the main roads from Peking *via* Hami (65 m. to S.) to Kulja. It comprises two towns, the one Manchu and the other Chinese. About 12 m. N. is Lake Barkul.

Barlaam and Josaphat, a religious romance which emanated from the East, and attained great popularity in Europe during the middle ages. It contains the history of the life of Josaphat, son of Abener, who was converted to the Christian faith by Barlaam, an eremite. The story is simply a Christianized version of the legendary history of Buddha—a fact first proved by Liebrecht in

1862. The Greek translation was first published by Boissonade in his *Anecdota*, vol. iv. (1832). Barlaam and Josaphat have both been canonized by the Greek and Roman Churches. See Max Müller's *Chips from a German Workshop*, 'On the Migration of Fables' (1880); Rhys Davids's *Buddhist Birth Stories* (1880); Brauholtz's *Die erste nichtchristliche Parabel des Barlaam* (1884); Jacobs's *Barlaam and Josaphat* (1896), and Paris's *Poèmes et Legendes du Moyen Age* (1900).

Barlad. See BERLAD.

Bar-le-Duc, or BAR-SUR-ORNAIN, tn., cap. dep. Meuse, France, on l. bk. of the Ormain, 127 m. by rail E. of Paris. It is partly built in the valley (Ville Basse), and partly on the heights to the S. (Ville Haute). Preserves are largely made, and there are cotton and hosiery industries, as well as mines, in the vicinity. The church of St. Etienne or St. Pierre (14th century) contains the tomb of William of Orange. The great Duke of Guise (1519-63) and Marshal Oudinot (1767-1847) were born here. Pop. 17,300.

Barletta, seapt. tn., prov. Bari, Italy, on the Adriatic coast, 102 m. by rail N.W. of Brindisi. It has a colossal bronze statue of one of the Roman emperors (Heraclius?), discovered in the sea. Exports tartar, tartaric acid, sulphur, oil, etc. Pop. 50,000.

Barley (Lat. *Hordeum vulgare*), the most widely cultivated of all cereals, has been known from the most ancient times, and a form resembling the two-rowed kind is found wild in W. Asia. The ear of barley is a compound spike, consisting of a central axis bearing alternately on two sides spikelets of three flowers each. The outer glume of each flower terminates in a long awn roughened with very minute bristle-like hairs which point forwards. The commonest and most valuable has

two rows of grain. The central flower in each spikelet ripens, the two lateral ones remaining barren. This kind is used chiefly for malting. In Norway, the Highlands of Scotland, and other cold countries the four-rowed variety, 'bere' or 'bigg,' is mostly grown. All its flowers are fertile, but instead of forming six rows, they arrange themselves so as to give the appearance of four. The six-rowed variety, with all its flowers fertile, is an ancient form, less valuable than the two foregoing. Sprat or battledore barley is a dwarf two-rowed kind, of no value, and rarely cultivated. All the above kinds have the husk (flowering glumes) attached to the ripe grain, but there are Siberian and Himalayan varieties which have naked grains like those of wheat. In Great Britain from two to four bushels per acre are sown in March, April, or even early in May in late springs. Although it is the last cereal sown, it is the earliest to ripen, being harvested thirteen to fifteen weeks after sowing. It thrives best on light, friable loams or calcareous soils. When ripe the ear bends over like the blade of a scythe, and becomes light yellow. Barley is largely grown for beer brewing, and as uniform germination is required by the maltster, it is important that the grain be quite ripe when cut. The average return of grain in a crop is from 30 to 40 bushels per acre, but it varies from 15 to 76 bushels in Great Britain. The best weighs from 54 to 56 lbs. per bushel. In January 1837 the average price in Edinburgh was 34s. per quarter; in 1850, 24s. 3d.; and in 1910, 26s. to 28s. 11d. A generation ago barley was much used for making bread; but this is now done only to a limited extent, in rural districts. Scottish or pot barley is the grain deprived of its husk, and is used in the making of broth. Pearl barley is

the grain with husk and coat removed. The barley hummeller or barley awner is a machine for removing the broken awns from the grain after threshing. A barley haller is a machine for removing the husk and coats in the making of pot and pearl barley. See AGRICULTURE.

Barley-break, an old English country game played by six persons, three of each sex, arranged in couples, and placed in three contiguous plots of ground, the centre one called 'hell.' The couple in 'hell' attempted to catch the others as they passed through. Numerous allusions occur in literature to this game, among others by Massinger, Sidney, Suckling, and Herrick. The game is now chiefly confined to Cumberland, where it is called *barley-brigs*; and it is still played in Aberdeenshire, where it is called *baria-braks*.

Barleycorn, an old measure of length = $\frac{1}{3}$ inch.

Barley Midge, a small two-winged fly of the family Cecidomyiidae, similar to the Hessian fly, the clover-seed midge, and the wheat fly; so called from the attacks of its larvæ on growing barley.

Barlow, HENRY CLARK (1806-1876), English writer on Dante, born at Newington Butts, Surrey. In 1850 he published *Remarks on the Reading of the 59th Verse of the 5th Canto*, and in 1852 devoted some time to collating Dante MSS. on the Continent and in England. From 1857 to 1864 Barlow published many papers on his favourite subject, and in the latter year appeared his principal work, *Critical, Historical, and Philosophical Contributions to the Study of the 'Divina Commedia.'* In 1865 he took a prominent part in, and wrote a description of, the sixth Dante centenary celebration at Florence. He endowed a course of lectures on Dante at the Uni-

versity College, London. He also published *Essays on Symbolism* (1866).

Barlow, JANE (1860), Irish authoress, born at Clontarf, Co. Dublin; became known by her volumes of studies of Irish peasant life—*Bogland Studies* (1892), *Irish Idylls* (1892), *Kerrigan's Quality* (1893), *The End of Elfintown* (1894), *The Battle of the Frogs and Mice* (1894), *Strangers at Lisconnel* (1895), *Creel of Irish Stories* (1897), *From the East unto the West* (1898), *From the Land of the Shamrock* (1900), *Ghostbereft* (1902), *By Beach and Bog Land* (1905), *Irish Neighbours* (1907), *The Mockers* (1908), and *Irish People in Irish Places* (1909).

Barlow, JOEL (1754-1812), American poet and politician, who visited England (1788) and France (1792), where he received the rights of citizenship. In 1795 he was American consul at Algiers. After that he lived in Paris and in the United States (1805-11). Returning to Europe as commissioner to Napoleon, whom he found in Russia, he died in Poland during the disastrous retreat. Chief works: *The Vision of Columbus* (1787); *The Conspiracy of Kings* (1792); *Hasty Pudding* (1805); *The Columbiad* (1807), an enlargement of the first named. See *Life* by Todd (1886).

Barlow, PETER (1776-1862), English mathematician, born at Norwich; became a professor of mathematics at the Royal Military Academy, Woolwich. From 1811 he published works on mathematics, improved the mariner's compass (1821), and, by means of the 'Barlow lens,' produced a new and useful telescope of greater than ordinary magnifying power. See *Min. of Proc. of Inst. Civil Engineers*, vol. xxii. p. 615, 1862-3.

Barlow, THOMAS (1607-91), bishop of Lincoln, born at Orton, Westmorland; at Oxford was regarded as a master of casuistry,

logic, and philosophy, and a strong opponent of Pelagianism, Socinianism, and Popery. He was librarian of the Bodleian (1642-60), prebendary of Worcester (1660), archdeacon of Oxford (1661), and bishop of Lincoln (1675). His works include *Exercitationes aliquot Metaphysicæ de Deo* (1637) and *Concerning the Invocation of Saints*. See Wood's *Athenæ Oxon.* (Bliss), iv. 333, 880 (1813-20).

Barlow, THOMAS OLDHAM (1824-89), English line and mezzotint engraver, who reproduced many of the works of the great contemporary artists, including John Phillip, Millais (*The Huguenot*, 1856, etc.), Turner (*Wreck of the 'Minotaur,'* etc.), Landseer, and others; R.A. in 1881.

Barlow, SIR THOMAS (1845), physician, graduate of London University (1874), and fellow of the Royal College of Physicians (1880); professor of clinical medicine and physician to University College Hospital; physician extraordinary to Queen Victoria, and to the late King Edward VII.

Barlow, WILLIAM HENRY (1812-1902), English engineer, who was associated with the building of St. Pancras station, London, the Clifton Suspension Bridge (1861), the new Tay Bridge (1880-7), and advised on the plans of the Forth Bridge. He had much to do with the adoption of mild (Bessemer) steel in the construction of bridges and ships.

Barm. See YEAST.

Barmecides, a great Persian family who came to power under the Abbaside caliphs of Bagdad. One member of it, Khalid-ibn-Bermek, was prime minister to the first two Abbasides; he also acted as tutor to Haroun al-Raschid. Khalid's son, Yahya, became (786) Haroun's chief minister. One of Yahya's sons, Jaafar, became Haroun's intimate companion. He and all the Barmecide family were put to death (803), without

known cause, by order of the caliph. Jaafar's virtues and tragic fate are a popular subject in Persian literature.—**BARMECIDIAN FEAST**, applied to a visionary banquet, takes its name from a story in the *Arabian Nights' Entertainments*.

Barmen, tn., dist. Düsseldorf prov. Rhineland, Prussia, in the valley of the Wupper, immediately adjacent to and E. of Elberfeld, 35 m. by rail E. of Düsseldorf. It is a pleasant, clean town, the seat of very extensive manufacture of ribbons, twine, thread, trimmings, buttons, chemicals, cottons, and silks, with dye works (Turkey red) and calico-printing works. Pop. 160,000.

Barmouth, wat.-pl. of Merionethshire, Wales, 7 m. W. by S. of Dolgelly. Across the estuary is Cader Idris (2,898 ft.). Old Barmouth is picturesquely situated on the side of a steep hill. Pop. 2,200.

Barn. See FARM AND FARM BUILDINGS.

Barnabas, otherwise JOSEPH or JOSEPH, a Levite, born in Cyprus and one of Paul's most distinguished fellow-workers. He comes before us in Acts 4:36 f. as one who has generously surrendered to the apostles the money he had received from the sale of a field. He afterwards introduces Paul to the church at Jerusalem, and a little later joins him in his first missionary journey. When about to start on a second expedition, a difference arises between the pair, and they separate; but they are ultimately reconciled. The later traditions about Barnabas (e.g. that he was bishop of Milan, martyred at Salamis, etc.) are worthless, as is also Tertullian's ascription to him of the authorship of the Epistle to the Hebrews. See BARNABAS, EPISTLE OF; *Life of St. Paul* by Farrar (1877) and by Conybeare and Howson (1862).

Barnabas, EPISTLE OF, an important Christian work found in some early MSS. of the Bible, and actually accepted as genuine by Origen and Clement of Alexandria. Its spurious character was generally admitted by the time of Eusebius. It consists of two parts: (1) ch. 1-17, designed to instruct the reader in true Christian knowledge (*gnosis*), especially as regards the relation of Christianity to the Old Testament dispensation; and (2) ch. 18-21, a delineation of the 'two ways'—the acceptance or rejection of the Christian life. The epistle is violently anti-Jewish in tone, and maintains that Christians alone are the true inheritors of the promises. The latter portion of the epistle is closely related to the Didache, and Holtzmann believes both to be redactions of a work called *The Two Ways*. Harnack dates the epistle about 130-131 A.D.; Lightfoot, earlier than 79 A.D. See W. Möller's *History of the Christian Church* (3rd ed. 1902), vol. i. (trans.), p. 110 f.

Barnabites, a religious order, founded in Milan in 1530, under the name of 'Regular Clerks of St. Paul,' but popularly styled 'Barnabites,' from St. Barnabas, the church in which they assembled. The order extended from Italy to Germany, France, and Austria. Expelled in 1880 from France, they now form some twenty colleges, in Italy, Austria, and Belgium.

Barnaby, SIR NATHANIEL (1829), British naval architect, was born at Chatham, and apprenticed as a shipwright at Sheerness in 1843. From 1855 to 1885 he was employed at the Admiralty, and assisted in the designing and construction of nearly all the vessels built for the navy during those years. From 1870 to 1885 (when he was knighted) he was chief naval architect and director of naval

construction. He was one of the founders of the Institute of Naval Architects, of which he is hon. vice-president.

Barnacle, a name applied to the true or ship barnacle (*Lepas*), to the common acorn shell (*Balanus*), or generally to the members of the crustacean order Cirripedia, to which both of these belong. The ship barnacle consists of a fleshy stalk attaching the animal to floating wood, and a series of five white calcareous shells at the end of the stalk, enclosing six pairs of branched appendages (cirri). By means of these cirri the animal filters from the water the minute particles on which it feeds. Except for them, it shows in adult life practically no definite crustacean character; but the study of development shows that it must have arisen from a typically crustacean stock.

Barnacle or BERNICLE GOOSE (*Bernicla leucopsis*), an Arctic bird migrating southward during winter as far as the Mediterranean and Mississippi, and common on the west coast of Britain during winter. A baseless tradition once connected it with the barnacle. Max Müller derives the name from *Hibernicula*, or Irish geese. Like its allies, it is gray and black in colour, with white markings and black bill and feet, is smaller than the common wild goose, and weighs about five pounds.

Barnard, LADY ANNE, née LINDSAY (1750-1825), author of the ballad *Auld Robin Gray*, composed in 1771, but her authorship of it was unknown until she confessed it to Scott in 1823. It was edited by Sir Walter Scott for the Bannatyne Club (1824). In 1901 was published *South Africa a Century ago: Letters written from the Cape of Good Hope, 1797-1801*, by Lady Anne Barnard. In 1824 a book was printed, but never published (only three copies of which are extant), entitled *Lays*

of the *Lindsays: being Poems by the Ladies of the House of Balcarres*. The poems were by Lady Anne and her sisters.

Barnard, FREDERICK (1846-96), English humorous artist in black and white, contributed to *Punch* and *Fun* from 1863, and illustrated numerous books, of which the most famous is the 'Household Edition' of the works of Charles Dickens.

Barnard, HENRY (1811-1900), American writer on education; president of University of Wisconsin (1857-9); president of St. John's College, Annapolis (1865-6); first U.S. commissioner of education (1867-70). In addition, he organized the Bureau of Education, and founded (1855) the *American Journal of Education*. His numerous papers were published in 1886 as *American Library of Schools and Education*.

Barnard Castle, mrkt. tn., l. bk. of the Tees, co. Durham, England, 15 m. w. of Darlington. John Baliol, the Scottish king, was a native of the place. Among principal buildings are the church of St. Mary and the Bowes art museum. The manor of Rokeby (Scott's *Rokeby*) is in the neighbourhood. Flax-thread making is the chief industry. Pop. 4,400.

Barnard College, New York City, U.S.A., is an institution for the higher education of women, and for their preparation for the examinations of Columbia University, with which it is affiliated. It received its charter in 1889, and its students in 1908 numbered 580. Its foundation was largely due to the exertions of Frederick A. P. Barnard.

Barnardo, THOMAS JOHN (1845-1905), known as Dr. Barnardo, was a native of Ireland, and founded the Barnardo Homes in E. London in 1866, for the waifs and homeless children gathered from the streets of all British cities. Of these,

over 60,000 have passed through the homes, and over 15,000 have been successfully placed in Canada and other British colonies. At Ilford, in Essex, he founded in 1873 a 'village home' for training girls, and at N. Elmham, in Norfolk, a training school for the navy and the mercantile marine. The children of the well-to-do were enlisted in the work through the formation, in 1891, of the Young Helpers' League. See *Memoirs* by Mrs. Barnardo (1907).

Barnato, BARNETT ISAACS (1852-97), S. African financier, was the son of humble Jewish parents (Isaacs) of Aldgate, London. In 1873 he went out to S. Africa as a conjurer and entertainer, assumed the name of Barnato, and soon became a diamond dealer at Kimberley. He there built up a great business, which, as Barnato Brothers in London (1880), and the Barnato Diamond Mining Company at Kimberley (1881), rivalled in power and enterprise the De Beers group, of which Cecil Rhodes was the head. In 1888 the two great companies amalgamated. Returning from S. Africa in ill health in 1897, he threw himself overboard from the liner *Scot*. See *Memoir* by H. Raymond (1897).

Barnaul, dist. tn. of Siberia, gov. Tomsk, on the l. bk. of the Ob, 220 m. s. by w. of Tomsk. The administration of the mining district of the Altai is established here. Barnaul has a mineral museum and soda factories. Alt. 479 ft. Pop. 30,000.

Barnave, ANTOINE PIERRE JOSEPH MARIE (1761-93), French revolutionist, represented his native city, Grenoble, in the Assembly (1789); opposed personal violence towards the king and the royal family, and displayed great courtesy to them when acting as commissioner to lead Louis XVI. back from Varennes to Paris. His

advocacy of moderate measures led him to be suspected of royalist sentiments. Denounced to the Assembly, he was guillotined on Nov. 29, 1793. According to Macaulay, he was 'the best debater in the National Assembly.' See De Salvandy's *Vie de Barnave* (1833), and Lamartine's *Girondins* (1846).

Barnay, LUDWIG (1842), German actor, born at Budapest, where he obtained his first great success in 1861. Afterwards he played in all the large towns of Germany and Austria, especially in Mainz, Weimar, and Frankfurt-on-Main. In 1888 he founded in Berlin a theatre of his own, and conducted it until 1894, when he retired into private life. His principal characters were Hamlet, King Lear, Othello, William Tell, Wallenstein, and Kean.

Barnburners, a branch of the Democrats in America. The name, which was first used about 1844, originated in a comparison between their rigorous demands for reform and the policy of a Dutchman who set fire to his barn to drive out the rats. Failing to make themselves heard sufficiently in 1848 at the Democratic National Convention, they subsequently supported Van Buren's presidential candidature, but without success. A partial reconciliation between the Barnburners (then called 'Softs') and the Hunkers took place in 1852.

Barnby, SIR JOSEPH (1838-96), English musician and composer, was a native of York. Educated at the Royal Academy of Music, he held the following offices: organist of St. Andrew's, Wells Street, London (1862); conductor of Barnby's choir (1864-71); conductor of the Albert Hall Royal Choral Society from 1871 till his death; precentor and director of music at Eton (1875); and principal of the Guildhall School of Music (1892). He was knighted in 1892. Composer of numerous

hymn tunes, part songs, and the oratorio *Rebekah* (1881).

Barnes, par., Surrey, England, on r. bk. of R. Thames, 7 m. s.w. of London. Pop. 10,000.

Barnes, THOMAS (1786-1841), educated at Christ's Hospital (along with Leigh Hunt) and at Pembroke College, Cambridge. He was from 1817 till his death editor of the *Times*, which under his guidance first assumed its commanding position in journalism. He was at first violently radical, but moderated his views with advancing years, although he was a vigorous supporter of the Reform Bill.

Barnes, WILLIAM (1800-86), poet and clergyman, was born at Rushay, near Salisbury. His first volume—*Orra: a Lapland Tale*—was published in 1822. He became master of a school at Mere in Wiltshire in 1823, returning to Dorchester in 1835. He was ordained in 1847, and became curate at Whitcombe in 1847, and rector of Winterbourne Came, near Dorchester, in 1862, where he died. He began to write his Dorset poems in 1833, publishing *Poems of Rural Life in the Dorset Dialect* (1844), *Homely Rhymes* (1857), and a third volume in 1863. A combined edition was published in 1879, under the first title. He was a lyric writer of a high order. In his verses, which are homely and tender, he never leaves the pleasant fields of his native Dorsetshire. They are entirely free from foreign influence, save where he takes the Persian and Italian poets as models in metre and rhyme. See his *Life* (1887) by his daughter, Mrs. Baxter ('Leader Scott').

Barnet, HIGH BARNET, or CHIPPING BARNET, mrkt. tn., Hertfordshire, England, 11 m. N. of London, on G.N.R. Here, in 1471, Edward of York defeated the Lancastrians under Warwick. An obelisk marks the spot where

Warwick made his last stand. It is largely a London residential district. Pop. 8,000. See Steven's *Old Barnet* (1896).

Barnett, JOHN (1802-90), English musical composer and singer, born at Bedford, pupil of Arnold; composed songs, part songs, instrumental music, and operas, including *The Mountain Sylph* (1834) and *Fair Rosamond* (1837), and an oratorio, *The Omnipresence of the Deity*. In 1844 he published *School for the Voice*.

Barnett, JOHN FRANCIS (1837), English musical composer, nephew of John Barnett, born in London; became professor at the Royal College of Music and the Guildhall School of Music, and is honorary director of the London Academy of Music. He has written an oratorio, *The Raising of Lazarus* (1876), produced with great success at Birmingham; *The Ancient Mariner* (1867), *Paradise and the Peri* (1870), *The Lay of the Last Minstrel* (1873), *The Building of the Ship* (1880), *The Wishing Bell* (1893), and *Liebeslied im alten Styl* (1895), mostly cantatas composed for the Birmingham, Liverpool, and Leeds musical festivals.

Barnett, SAMUEL AUGUSTUS (1844), English Churchman and philanthropist, born at Bristol; became canon of Bristol (1893) and canon of Westminster (1906), founder and first warden of Toynbee Hall, Whitechapel (1884-1906), which was organized for the purpose of raising the moral and intellectual level of a poorer part of London through the personal example of university men. President of Toynbee Hall (since 1906). Author of *Practical Socialism* (1893), *Service of God* (1897), *Religion and Progress* (1907), and *Towards Social Reform* (1909).

Barneveldt, vil., Gelderland prov., Netherlands, 20 m. N.W. of Arnheim. Pop. 8,000.

Barneveldt, JAN VAN OLDE (1547-1619), Dutch statesman, was born near Utrecht. After taking part in an embassy to England, he became advocate-general of the prov. of Holland (1585), and the head of the republican party in the state, in opposition to Maurice of Nassau, whose designs and warlike policy he successfully opposed, concluding (1609) a twelve years' truce with Spain. Having been appointed 'grand-pensionary,' he took the side of the Arminians against Maurice's support of the Gomarists, who were favoured by the army, the clergy, and the people of Holland. In 1619, after the condemnation of the Arminians by the Synod of Dort, Barneveldt was convicted of treason and beheaded. See Motley's *Life of Barneveldt* (1874).

Barnfield, RICHARD (1574-1627), English poet, born at Nurbury, Shropshire, lived as a country gentleman at Stone, Staffordshire. He wrote sonnets and pastorals in the Spenserian manner. His best verses, 'As it fell upon a day,' were printed as Shakespeare's in *The Passionate Pilgrim* (1599). He wrote *The Affectionate Shepherd* (1594); *Cynthia* (1595); *The Encomion of Lady Pecunia, with Poems in Divers Humours*, etc. (1598). *Collected Works*, ed. A. B. Grosart (1878) and E. Arber (1882).

Barnim, a district in Brandenburg, Prussia, divided into Upper and Lower Barnim, the latter containing Berlin.

Barnsley, par. and munic. bor., England, in W. Riding of Yorkshire, on R. Dearne, 12 m. N. of Sheffield. Coal is abundant in the vicinity, and the town has a linen and paper industry, and manufactures of iron, steel, and glass, ready-made clothing, boots and shoes, bobbins, etc. It is connected with Leeds and Wakefield by the Barnsley Canal, and contains a fine public hall and

park. Pop. of munic. bor. 47,000. See Jackson's *Hist. of Barnsley* (1858).

Barnstaple, munic. bor. and seapt., Devonshire, England, 6 m. from the mouth of the river Taw, and 35 m. N.W. of Exeter. The bridge (with 16 arches) over the river is said to be of the 12th century, and the grammar school dates from the 14th. The tidal harbour is 13 ft. deep at high water. There are manufactures of lace and gloves, and large cabinet-networks, tanneries, and potteries ('Barum ware'). In Elizabethan days it was a considerable seaport, and sent ships to fight the Spanish Armada. Pop. of munic. bor. 14,000. See Gardiner's *Illustrated Barnstaple* (1904), and *Barnstaple, 1837-1897* (1897).

Barnum, PHINEAS TAYLOR (1810-91), American showman, who accumulated great wealth by touring throughout the world with a huge variety entertainment, known as 'Barnum and Bailey's.' His first success was achieved as manager for Jenny Lind (1849-51). See his *Autobiography* (1854 and 1888); *Humbugs of the World* (1865); *Struggles and Triumphs* (1869); *Money-getting* (1883); and *Life* by Benton (1902).

Barocchi. See VIGNOLA.

Baroche, PIERRE JULES (1802-1870), a French lawyer and politician, who allied himself with the party of Napoleon III., and was successively minister of the interior (1850) and of foreign affairs (1851). After the *coup d'état* of 1851 he held office as president of the Council of State. In 1863 he was minister of justice; but after Napoleon's fall, in 1870, he fled to Jersey, where he died.

Baroda. (1.) State, situated in the Gujarat div. of Bombay, India; is one of the three large Mahratta feudatories of the British Indian empire, and is ruled by a chief called the Gaekwar. The greater

portion of the dominion is concentrated about the centre of Gujarat, but strips of Baroda territory are scattered over adjacent British districts, and intermingle with the lands of other native chiefs in Kathiawar. Area, 8,570 sq. m. Pop. 2,000,000. (2.) Capital of the feudatory state of the same name, situated 250 m. by rail N. of Bombay. Pop. 104,000.

Barograph. See BAROMETER.

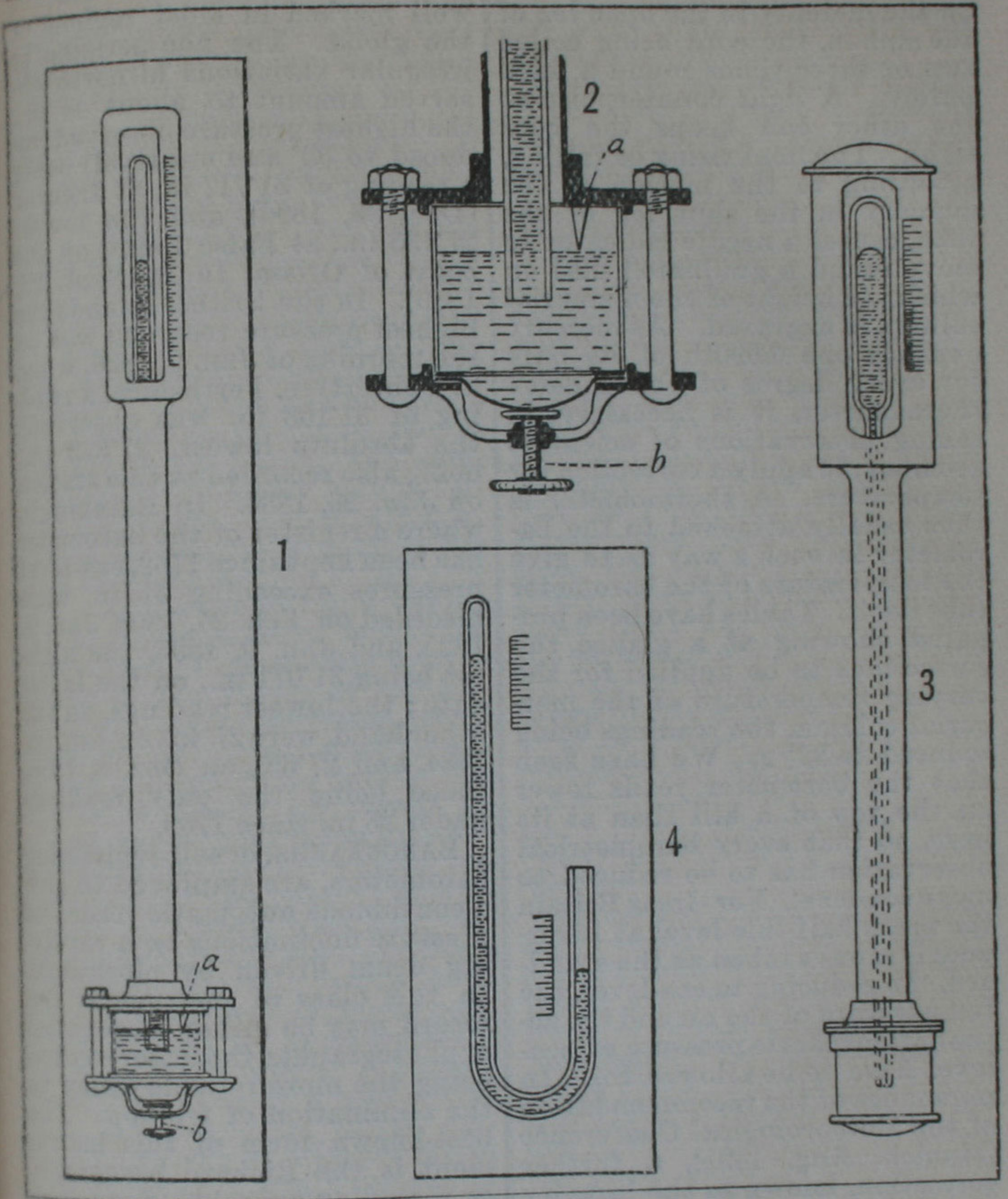
Barometer (Gr. 'a measure of weight'), an instrument for determining the pressure of the atmosphere. An observation by Galileo, who remarked that water would not rise in a pump more than 'eighteen cubits,' led to the discovery, in 1643, of air-pressure by his pupil Torricelli. His classical experiment consisted in filling a tube about three feet long and closed at one end, with mercury. This he inverted, immersing its lower end into a basin filled half with mercury and half with water. The mercury descended in the tube, remaining stationary at a height of thirty inches, a vacant space of about six inches being thus left at the top of the tube, which is still known as the 'Torricellian vacuum.' On raising the open end of the tube above the level of the mercury, but still under the surface of the water, all the mercury in the tube rushed rapidly out, its place being taken by the water, which completely filled the tube. He thus concluded that the elevation of the column of liquid which will stand in any tube is determined by the specific gravity of the liquid composing the column and by the atmospheric pressure. In 1648 Pascal of Clermont proved the accuracy of Torricelli's surmises by carrying a barometer from Clermont to the summit of the Puy de Dome, the mercury falling 3.33 in., indicating a height of 3,458 ft. (A historical account of the barometer will be found in an address

by Ellis, *Quar. Jour. Roy. Met. Soc.*, vol. xii. p. 131.) As air is about 10,000 times lighter than mercury, the height of the atmosphere should be 10,000 times 30 in., or about 47 m. As, however, its density diminishes according to its height, the actual elevation of the gaseous envelope surrounding the globe is much greater than 47 m.

In the construction of a barometer much care has to be taken that pure mercury, of sp. gr. 13.594, is employed. This is introduced into a glass tube about 34 in. long, and the mercury is boiled in the tube, so that any air and moisture may be got rid of. The tube, which in first-class instruments is of large bore, stands vertically in a cistern of mercury. The height of the mercurial column in the tube above the level of the cistern is measured by means of a graduated scale, which is usually provided with a vernier. The glass tube is fixed in a frame to protect it from damage, and the divisions of the scale, unless the instrument is intended for use on a mountain, vary from 26 to 32 in. In barometers for scientific purposes the scale and the frame are both made of brass, of which metal the expansive coefficient is well known. It is thus possible to make allowances for the alteration by heat in the length of the scale, which has to be taken into account in the reduction of barometric observations to a fixed temperature. Scales fixed to wood are liable to serious alteration in length and in shape, owing to changes in the humidity of the air.

In the construction of the barometer several difficulties have to be overcome. It will, for example, be readily understood that the level of the mercury in the cistern varies with every movement of the mercury. If it rises, mercury is

transferred from the cistern to the tube, and the level of the cistern falls. On the other hand, should the reverse process take place, and mercury flow from the tube to the cistern, the level of the mercury rises. As the height of the barometer is calculated from the level of the mercury in the cistern, a correction, known as the 'error of capacity,' is introduced. Another source of difficulty is how to cover the cistern so as to keep the mercury from escaping, and at the same time render the instrument portable without affecting the pressure of the atmosphere on the mercurial surface contained in the cistern. In the Fortin barometer this difficulty is eliminated by making the bottom of the cistern of leather, while in the Kew barometer a small cavity in the roof of the cistern is covered with the same material. The two barometers specified are those employed for scientific observation, and in them the 'capacity correction' referred to is done away with. In the Fortin barometer (Fig. 1) the starting-point of the scale is formed by an ivory pin, which is placed in the cistern of mercury. When a reading is to be made, the mercury is raised or lowered by means of a screw until its surface just touches the pin, the lower end of which corresponds with the zero of the scale. In Fig. 2 an ingenious device is shown which facilitates the adjustment of the ivory point and its image as reflected on the bright surface of the mercury below. The Kew barometer (Fig. 3) is admirably suited for observations on shipboard, or in situations where there is much oscillation. In order to check the irregular oscillation of the mercury due to the motion of the ship, a tube of small calibre throughout the greater part of its length is employed. A closed cistern is used, and a scale of contracted inches, which



Barometers.

1. Fortin Barometer. 2. Lower part enlarged: *a*, ivory pin; *b*, adjusting screw. 3. Kew Barometer. 4. Siphon Barometer.

are shortened from the upper part of the tube downwards in proportion to the relation existing between the diameter of the tube and cistern. In this way the error of capacity is allowed for. In the siphon barometer (Fig. 4) the capacity error is got over by dispensing with the cistern and

using a U-shaped tube, in which the long leg is closed and the short leg open. The ordinary wheel barometer, or 'weather-glass,' is of this description, and was invented in 1665 by Robert Hooke, secretary to the Royal Society. In this instrument a float attached to a silk cord rests

on the mercury in the open leg of the siphon, the cord being coiled two or three times round a fixed pulley. A light counterpoise at the other end keeps the cord tight. The float rising or falling, according to the motion of the mercury in the shut leg of the tube, causes a needle indicator to move round a graduated dial on which the height of the mercurial column is engraved. As mercury expands one 9,990th of its bulk for every degree of Fahrenheit's thermometer, it is necessary, in taking observations of scientific accuracy, to apply a correction for temperature. A thermometer is thus usually attached to the barometer in such a way as to give the temperature of the barometer tube itself. Tables have been prepared showing at a glance the corrections to be applied for the varying temperature of the mercurial column, the readings being reduced to 32° F. We have seen that the barometer reads lower on the top of a hill than at its base, so that every barometrical observation has to be reduced to mean sea-level. For Great Britain the mean half-tide level at Liverpool is always taken as the standard. In reducing to sea-level, the temperature of the air and the actual atmospheric pressure at sea-level have to be allowed for. In pursuance of the recommendation of the Meteorological Conference (Munich, Aug. 1891), a further correction, known as the 'gravity correction,' is given effect to, in order to allow for the difference of gravity at any given station from that at lat. 45°.

Barometrical fluctuations are of two kinds—regular or periodic, and irregular or non-periodic. Of the regular oscillations the most marked is the diurnal one, which varies from a maximum of 0.150 in. in the tropics to barely $\frac{1}{1000}$ of an inch in polar regions. The seasonal swing in pressure is also

well marked in most regions of the globe. The non-periodic or irregular variations hitherto observed amount to about 4½ in., the highest pressure observed (reduced to 32° and sea-level) being a reading of 31.717 in. at Irkutsk (Dec. 20, 1896), and the lowest 27.135 in., at False Point, on the coast of Orissa, India (Sept. 22, 1885). In the British Islands the highest pressure recorded was on the morning of Jan. 9, 1896, when at Ochtertyre, Perthshire, a reading of 31.108 in. was observed, the absolute lowest, 27.333 in., being also recorded at this station on Jan. 26, 1884. In Edinburgh, where a register of the barometer has been kept since 1769, sea-level pressures exceeding 31 in. were recorded on Feb. 25, 1808, Jan. 9, 1825, and Jan. 9, 1896, the highest being 31.071 in., on the latter date; the lowest readings, on the other hand, were 27.451 on Jan. 26, 1884, and 27.651 on Dec. 8, 1886, those being the only readings under 28 in. since 1769.

BAROGRAPHS, or self-registering barometers, are employed to give a continuous automatic record of pressure fluctuations on a revolving drum driven by clockwork. In this class of instrument the record may be either mechanical or photographic, the latter method being the more reliable owing to the elimination of friction. The best-known form of this instrument is the Richard barograph, or recording aneroid. See works on meteorology, such as the treatises by R. H. Scott (1883), H. C. Russell (1871), F. Waldo (1893), A. Buchan (1868), W. M. Davis (1894), and J. W. Moore (1894). See also ANEROID.

Baron (A.S. 'a man'), a word which has come to mean first a 'king's man' and afterwards a 'noble.' The title was unknown in Britain prior to the Norman conquest, and its earliest usage shows that it was applied to all

the feudatories of princes, irrespective of other titles they held, and therefore it included all the nobility. Feudatories were, in early times, of two classes—(1) barons *in capite*, holding their lands from the king, these being the greater barons; and (2) the lesser barons, who held their lands from the great vassals of the king by military tenure *in capite*. In Magna Charta this distinction is observed. By the time of Edward I. only the greater barons could claim to be summoned to the House of Lords; the summoning of the lesser barons fell into desuetude. The creation of barons by patent dates from the time of Richard II.—*i.e.* the year 1387. At the present time barons are of three classes, being the lowest rank of the nobility to have a seat in the House of Lords—(1) *barons by prescription*, their ancestors having sat since an unknown and indefinite date in the House of Lords; (2) *barons by patent*, the dignity being granted to them and their heirs under the conditions of the patent; and (3) *barons by tenure*, who hold the title as annexed to land. In Scotland and Ireland, barons have seats in the House of Lords only when elected as representative peers by their order. A baron's coronet consists of a gold circlet with six pearls set on it, surrounding a cap of crimson velvet and ermine. Certain judges of the English and Irish Courts of Exchequer were formerly called barons; but in England the last holder of the title died in 1897, and the last holder of the title in Ireland is now (1911) sitting in the Court of King's Bench.

Baron and Femme, or FEME, in heraldry a term equivalent to husband and wife; applied where the coats of arms of a man and his wife are borne *per pale* in the same escutcheon—the husband's coat being placed on the dexter side

and the wife's on the sinister. The term is also used in law.

Baronet, originally a title given to the lesser barons, a meaning now obsolete, is a title of hereditary rank, in degree next to that of baron, instituted by James I. in 1611, professedly to support the English and Scottish colonization of Ulster. Each baronet had to pay the king £1,080. The number was limited to 200, but this limit was soon departed from, and the payment annulled. A similar Irish order was instituted by James in 1619, and a Scottish (the so-called baronets of Nova Scotia) by Charles I. in 1625; but of the latter none have been created since the Union (1707); of the former, none since 1801. In their stead there has been instituted the baronetcy of the United Kingdom or of Great Britain. The badge of the order is the 'bloody hand of Ulster.' A baronet has precedence of all knights except bannerets, knights of the Garter, and Privy Councillors. See Cokayne's *Complete Baronetcy* (1900-9).

Baronius, CÆSAR (1538-1607), controversial historian of the Roman Catholic Church; born in S. Italy; studied under St. Philip Neri, of whose congregation of the Oratory he was chosen superior (1593); appointed cardinal (1596), and librarian of the Vatican (1597). He failed to attain the papal chair in 1605 because of Spanish political opposition. His demonstration of the historical identity of the Western with the primitive Church is elaborated in his famous *Annales Ecclesiastici a Christo Nato ad Annum 1198* (12 vols. 1588-1607), written in reply to the Protestant *Magdeburg Centuries*. Though uncritical, this chronicle is still of value to ecclesiastical historians; continued by Raynaldus and others to 1585, the *Annals* now extend to nearly 40 vols. (last ed. 1864-

1883). His *Martyrologium Romanum* (1586) is a great store of tradition. See *Life* (Ital.) by Sarra (1862).

Barons' War THE, (1263-7). See ENGLAND—*History* (Henry III.).

Barony, strictly the domain of a baron, but also applied to the tenure by which a baron held of his superior; also military or other 'honourable' tenure. Originally every peer of superior rank had also a barony annexed to his other titles, but the rule is not now universal. Baronies appertain also to bishops, as they formerly did to abbots, William the Conqueror having converted the spiritual tenure by which they held their lands under the Saxon rule into the Norman or feudal tenure by barony. In Scotland barony is applied to a large freehold estate or manor, even though the proprietor is a simple commoner. A *burgh of barony* is a corporation consisting of the inhabitants of a determinate tract of territory within the barony erected by the king, and subject to the government of magistrates. Whatever jurisdiction belongs to the magistrates of the burgh, the superior's jurisdiction is cumulative with it. A *court baron* is the necessary court of a manor. It was partly judicial and partly administrative. Other manorial courts were the customary court and court-leet. The word barony is used in Ireland for a subdivision of a county.

Barony. See GLASGOW.

Baroque, a term at first applied to ill-shaped pearls, now denotes fantastic, bizarre, and decadent forms in art, and even in nature. It is specially used in connection with an architectural style, a degeneration of the renaissance.

Barosma, a genus of small evergreen S. African shrubs having a strong odour; the leaves are used in medicine as a diuretic, under the native name buchu.

Barotac Nuevo, pueblo, Panay I., Philippines, prov. of and 16 m. from Iloilo; has trade in sugar, rice, coffee, cattle, and pina cloth. Pop. 10,000.

Barotse Land, or NORTH-WESTERN RHODESIA, a region in the Upper Zambezi, British S. Africa. It extends from 22° to 30° E., and from 11° S. to its S. boundary, the Zambezi. It is well watered and populous. The administrator of N.W. Rhodesia has his official residence at Kalomo, 300 m. by rail N.W. of Buluwayo. The inhabitants are Bantus. See Harding's *In Remotest Barotse Land* (1905).

Barpeta, tn., Kamrup dist., Assam, India, 48 m. N.W. of Gauhati. Pop. about 10,000.

Barque, a three-masted ship, square-rigged on the fore and main masts, and fore-and-aft on the mizzen. A BARQUENTINE differs from a barque in being only square-rigged on the fore mast.

Barquisimeto, tn. and episc. see, Venezuela, 170 m. W. of Caracas. It stands above the valley of the Rio Barquisimeto, and is connected by rail with its port, Tucacas, 100 m. to the N.E. Alt. 1,840 ft. Pop. 30,000.

Barr, ARCHIBALD (1855), Scottish inventor, born at Glenfield, Renfrewshire; has been professor of civil engineering and mechanics at Glasgow University since 1889. He has invented range-finders for fortress and field service, and, with Professor Stroud, a naval range-finder, electrical transmitting and receiving instruments for use between the conning tower and gun stations of war vessels, a pump for the production of high vacua, and several other scientific instruments and machines. The inventors have works specially designed and equipped for the manufacture of these articles at Anniesland, Glasgow.

Barr, ROBERT (1850), British novelist, born at Glasgow; edu-

eated in Toronto, but returned to Britain in 1881. His chief works are: *In the Midst of Alarms* (1894; new ed. 1900); *A Woman Inter-venes* (1896); *The Mutable Many* (1897); *The Countess Tekla* (1899); *The Unchanging East*, a book of travels (1900); *Lady Electra* (1904); *The Tempestuous Petticoat* (1905); and *Speculations of John Steele* (1905); *A Rock in the Baltic* (1906); *The Measure of the Rule* (1907); *Stranleigh's Millions* (1908); and *Cardillac* (1909). In conjunction with Jerome K. Jerome he founded the *Idler* (1892).

Barra. (1.) Small tn. 4 m. E. of Naples, and midway between that city and Mt. Vesuvius, Italy; a suburban residence of Neapolitans. Pop. 12,000. (2.) Island and par., Inverness-shire, Scotland, near s. extremity of the Outer Hebrides, 5 m. s.w. of S. Uist, and 108 m. by sea from Oban. The parish includes several other islands, inhabited and uninhabited. Area of par. 22,212 ac. Pop. 2,500.

Barrackpur, munic. tn., dist. of the Twenty-four Parganas, Bengal, India, 15 m. N. of Calcutta. The natives call it 'Charnak,' after Job Charnock, the founder of Calcutta. Here is the country residence of the viceroy of India. It was the scene of sepoy mutinies in 1824 and 1857. Pop.: N. Barrackpur, 12,000; S. Barrackpur, 20,000.

Barracks. Barracks were until recently designed, constructed, and repaired by the Royal Engineers, but their design and construction have now been entrusted to a new Barrack Department of the War Office under an architect with a civil staff. The following are the chief parts of a barrack:— (1.) Officers' mess and quarters. (See MESS.) (2.) Sergeants' mess. (See MESS.) (3.) Men's quarters. The men live from ten to twenty in a room. The beds are placed

with their head against the wall, and fold back in the daytime. On a shelf above his bed the man keeps his kit, neatly folded; and below are hung his accoutrements, rifle, etc. Tables and forms are placed in the centre of the room for meals, but the more modern barracks have separate dining-rooms. (4.) Orderly room, where the commanding officer deals with defaulters, and, with his staff, transacts regimental office work; company offices, from which the captains and their subalterns administer the companies, and where the men are paid; guard-rooms, cells, etc. (5.) Cook-houses and kitchens. (6.) Lavatories, where all washing is done, and where baths are provided. (7.) Regimental institute, including the canteen (*i.e.* grocery shop, coffee-room, and beer bar), the reading, writing, play, and billiard rooms, library, skittle ground, and occasionally a theatre. Every effort is made to render life within barracks attractive to the men. (8.) Married quarters for those men married on the strength. These are usually secluded from the men's quarters. (9.) Wash-houses for the convenience of the wives, who often do the washing of the whole regiment. (10.) Drill and store sheds, Morris-tube range, etc. See *Army Book for British Empire* (1893), and Richter's '*Gebäude für Militär. Zwecke*,' in *Handbuch der Architektur* (1887).

Barraconda. See GAMBIA.

Barracuda, or BARRACOUTA, a name applied to tropical and subtropical fishes of the genus *Sphyræna*, belonging to a family related to the mullets. They are large, voracious fishes, dreaded by bathers, and though edible, have at times poisonous properties. The name is sometimes applied to *Thyrsites atun*, a fish which forms an important article of export from New Zealand.

Barrafranca, tn., prov. Caltanissetta, Sicily, 11 m. S.E. of Caltanissetta, 1,470 ft. above sea-level. Pop. 11,000.

Barra Manza, tn., on r. bk. of the Parahiba do Sul, Brazil, 70 m. N.W. of Rio de Janeiro. Pop. 12,000.

Barramunda, a name applied to the fish *Ceratodus*, but used in Australia in a loose sense for more than one large fish.

Barranquilla, or **BARANQUILLA**, dep. and tn., Colombia. The tn. stands at the head of navigation on the Magdalena, which is not navigable at its mouth. It is in communication by rail with the seaport Puerto Colombia (formerly Sabanilla), 3 m. to the W. Exports coffee, hides, tobacco, divi-divi, ivory-nuts, cotton-seed, etc. Pop. 40,000. The dep. has an area of 1,200 sq. m., and a pop. of 110,000.

Barrantes, VICENTE (1829-98), Spanish poet and publicist; member of the Spanish Academy (1872); author of satiric articles which brought a heavy fine on him for their audacity, philosophic and political verses—*Narraciones Extrameñas* (1872-3), *Cuentos y Leyendas* (1875); and novels—*Siempre Tarde* (1851), *Juan de Padilla* (1855-6), *La Viuda de Padilla* (1857). He was also a learned bibliophile on subjects connected with Estremadura (1875-1879), and wrote a history of the Philippine Isles, *Guerras Piraticas de Filipinas* (1878).

Barraquete, ALONZO (d. 1561), Spanish sculptor, who studied in Florence under Michael Angelo. On his return to Spain he executed commissions for Charles V. at Toledo, Granada, and Valladolid. His bas-reliefs in the Alhambra, *The Triumphs of Charles V.*, representing the emperor as Hercules, are held in esteem. At 80 he executed the tomb of Cardinal Tavera in the Hospital of St. John the Baptist at Toledo.

See Leader Scott's *Sculpture, Renaissance and Modern* (1886).

Barras, PAUL FRANÇOIS JEAN NICOLAS, VICOMTE DE (1755-1829), who played a conspicuous part in the French revolution, was born at Fos-Emphoux, Var. Officer in the Pondichery regiment, he took part (1776-80) in the campaign in India. Returned by Var to the States-general, he voted for the king's immediate execution. As commander of the army besieging Toulon, he shares the responsibility for the cruel measures attending the reduction of that city by the republic. Again in Paris, he arrested Robespierre at the Hôtel de Ville. Nominated general-in-chief, he, or rather Bonaparte, whom he had selected as general of artillery, crushed the insurgents (Oct. 5, 1795). Thereupon appointed one of the five members of the Directory, and next (1797) practically dictator, he set up quite a royal establishment at the Luxembourg, which led to his overthrow (Nov. 9, 1799). Carlyle describes him well as 'a man of heat and haste; defective in utterance; defective indeed in anything to utter; yet not without a certain rapidity of glance, a certain swift transient courage.' He ultimately settled near Marseilles, and under the Bourbons lived the rest of his life in Paris. His *Mémoires* (4 vols.) were published by H. Duruy in 1895-6.

Barratry is the fraudulent act of the captain or crew of a vessel through which the owners or the freighters suffer injury, and is a risk often taken in policies of marine insurance. It is punishable, according to circumstances, with various terms of imprisonment up to penal servitude for life (Malicious Damage Act, 1861; Piracy Act, 1837). COMMON BARRATRY consists in frequently or habitually stirring up suits and quarrels at law or otherwise. It is a misdemeanour punishable by

fine and imprisonment. In old Scots law, barratry was a form of simony, consisting of the purchase of ecclesiastical benefices from Rome. It is also used to mean judicial corruption.

Barré (*i.e.* 'comrades'), collective name of numerous S. American aborigines who constitute a semi-independent confederacy about the head-waters of the Rio Negro, an affluent of the Amazons, and range thence across the Cassiquiari into the Upper Orinoco basin. They comprise eight main groups—Barré proper, Mandanaca, Guariguena, Cunipusana, Pacimonari, Yabahana, Masaca, and Tariana. They are one of the few progressive nations of S. America, and since about 1800 their speech (a stock language radically distinct from all others) has become a sort of *lingua franca* throughout an extensive region above the Orinoco cataracts and in the Brazilian province of Amazonas. The Barré retain the old tribal organization, reject the preaching of the missionaries, and carry on independent commercial relations with settled and more civilized neighbours from San Carlos del Rio Negro.

Barre, tn., Washington co., Vermont, U.S.A., 6 m. S.E. of Montpelier; has foundries and granite quarries. Pop. 11,000.

Barré, ISAAC (1726-1802), the son of a French refugee in Dublin, was with Wolfe at Quebec, where he was wounded (1759), in consequence of which he ultimately (1790) became blind. (He is represented in Benjamin West's well-known picture of the death of Wolfe. He held office under Bute, Pitt, and Shelburne, and gained the favour of the Americans by a spirited speech against the Stamp Act in 1765, and by his subsequent actions. Barré is one of those to whom the *Letters of Junius* have been ascribed.

Barrel. A barrel of wine contains $31\frac{1}{2}$ gallons; a barrel of ale, 36 gallons; a barrel of flour, 196 lbs.; a barrel of butter, 224 lbs.; and a barrel of pork or beef, 200 lbs. But the dry barrel is not a legalized measure, and quantities should be specified in pounds or bushels. The Italian *barile* varied from 7 to 31 gallons; the French *barrique* of Bordeaux contained 50 gallons. For manufacture of barrels, see COOPERAGE. *Barrel* is probably from root *bar*, with reference to the encircling hoops.

Barrel Organ, a portable mechanical organ played by a rotary handle. The handle turns a wooden cylinder set with brass pins, which raise certain trigger-shaped keys, and so open the valves to the pipes of the instrument. The date of the manufacture of the first barrel organs is uncertain, but at one time they were frequently used in rural churches and chapels. The ordinary barrel organ is made chiefly in the Black Forest, and is used principally by itinerant beggars; the cylinder is set with nine or ten tunes.

Barrenwort (*Epimedium alpinum*), a naturalized herbaceous plant of the barberry order, found rarely in hilly districts in the N. of England.

Barrés, MAURICE (1862), French novelist, born at Charmes-sur-Moselle. His best-known novels are *Le Jardin de Bérénice* (1891), *Les Déracinés* (1897), *L'Appel au Soldat* (1900), and *L'Ennemi des Lois* (1892). He has also written a comedy, *Une Journée Parlementaire* and *Huit Jours chez Mons. Renan* (1888). M. Barrés is a strong Catholic, and represents the Conservative school of modern French fiction.

Barrett, ELIZABETH. See BROWNING.

Barrett, LAWRENCE (1831-91), American actor of very varied powers, was trained to the stage from boyhood. He was for many

years (from 1857, and again from 1887) associated with Edwin Booth, of whom he wrote a *Life* (1881), and a critical study, *Edwin Booth and his Contemporaries* (1886). He played many of the leading Shakespearean parts, as well as Richelieu, Garrick, etc.

Barrett, WILSON (1846-1904), actor, novelist, dramatist, and poet, was born in Essex. He made his debut at Halifax in 1863, and in 1874 became manager of the Amphitheatre, Leeds. In 1879 he succeeded Mr. Hare in the management of the Court Theatre, London. Here he produced *Heartsease* (an adaptation of *La Dame aux Camélias*, in which he introduced Madame Modjeska to the English stage), *Romeo and Juliet* (himself appearing as Mercutio, a part well suited to his romantic style), and *Juana*. Barrett became lessee and manager of the Princess's Theatre in 1881, and produced *The Lights of London*, *Romany Rye*, *The Silver King*, *Claudian*, and *Junius, or the Household Gods*. In 1884 he produced *Hamlet*, which ran for 118 nights. Then followed *Hoodman Blind* and *The Lord Harry*. After a successful American tour (1886-7) he became manager of the Globe Theatre, and produced his own and G. R. Sims's *The Golden Ladder* and *The Lady of Lyons*. In 1888 he returned to the Princess's, and there played in *Benma-Chree* and *Good Old Times*, followed by his own play of *Nowadays*. After a third visit to America, he produced *The Manxman* (1894). Early in 1895 his great spectacular religious drama, *The Sign of the Cross*, appeared with great success at St. Louis, U.S.A., then at the Lyric Theatre, London, for over five hundred nights. In 1898 he paid a very successful visit to Australia, and on his return appeared again at the Lyceum, reviving old plays, and producing his *Man and his*

Makers, written in collaboration with Louis N. Parker. He dramatized Sienkiewicz's *Quo Vadis!* (1900; new ed. 1902), and also wrote several novels.

Barrhead, par. and tn. on R. Leven, Renfrewshire, Scotland, 9 m. s.w. of Glasgow. The chief industries are calico printing, shawl-weaving, cotton spinning and bleaching, and engineering. Pop. 10,000.

Barrias, LOUIS ERNEST (1841-1905), French sculptor, born in Paris; gained the 'prize of Rome' (1865), and exhibited in the Salon the *Spinning Girl of Megara* (1870), now in the Luxembourg Museum; *The Oath of Spartacus* (1871); *Fortuna and Amor* (1872); *The First Funeral—Adam and Eve with Abel's corpse* (1878), a bas-relief of great artistic value; *Nature Unveiling* (1899); and monuments to Palissy (1881), Augier (1895), Carnot (1896), the Madagascar Expedition (1897), Victor Hugo (1898), and Lavoisier (1900).

Barricades, obstructive works thrown up in haste to arrest an enemy's progress through a street or give cover to the besieged, were used by the city of Saguntum against Hannibal. At the siege of Carthage the Romans took some six days to surmount the barricades opposed to them. In the wars of the League the barricades raised by the Parisians compelled the retirement of Henry III.'s troops (May 12, 1588)—'journée des barricades.' Another 'journée des barricades' is Aug. 26, 1648, when, in the war of the Fronde, barricades were erected in Paris from Notre Dame to within a pistol-shot of the Palais Royal. Other historic barricades of Paris are those of July 27-30, 1830, when Charles X. was dethroned, and of June 23-26, 1848. Although Napoleon III. widened and macadamized the streets of Paris, barricades were again raised in the insurrection

of 1871. They can be constructed from any material; but earth should always be used if artillery fire can be brought against them.

Barrie, tn., Ontario, Canada, cap. of Simcoe co., 60 m. N. by W. of Toronto. Manufactures of leather, flour, stoves, and woollens. Pop. 6,000.

Barrie, JAMES MATTHEW (1860), Scottish novelist and dramatist, was born at Kirriemuir, Forfarshire; went to Nottingham in 1883 as leader-writer on the staff of the *Nottingham Journal*; then to London, where he wrote articles for the *St. James's Gazette*, *Speaker*, *National Observer*, *British Weekly* (as 'Gavin Ogilvy'), etc. His first notable book was *Auld Licht Idylls* (1888). This was followed by *A Window in Thrums* (1889) and *My Lady Nicotine* (1890). *The Little Minister* (1891) was his first serious attempt at a long novel. *Margaret Ogilvy* (a biography of his mother) and *Sentimental Tommy* appeared in 1896, the latter being followed by a sequel, *Tommy and Grizel*, in 1900. In 1902 appeared *The Little White Bird*, and in 1906 *Peter Pan in Kensington Gardens*. His first play, *Walker, London* (1892), was produced by J. L. Toole. It was followed by *Jane Annie* (1893), written in collaboration with Conan Doyle. *The Professor's Love Story* was produced at the Garrick Theatre in 1894, followed at the Haymarket in 1897 by *The Little Minister*, a successful burlesque of his own novel. *The Wedding Guest*, an attempt at a modern problem play, was produced at the Garrick in 1900. Other dramatic successes have been *Quality Street*, *The Admirable Crichton* (in many ways our best modern comedy), *Little Mary*, *What Every Woman Knows*, and *The Twelve-Pound Look*. For Christmas 1904 he produced a children's play,

Peter Pan, and in April 1905 *Pantaloon* and *Alice Sit-by-the-Fire*. See Hammerton's *J. M. Barrie and his Books* (1900).

Barrier Act, an act passed in 1697 by the General Assembly of the Church of Scotland, with the intention of preventing undue haste in ecclesiastical legislation. It provides that, before any change can be made in the laws of the church, such proposed legislation must first be approved by a majority of the presbyteries, and afterwards by the General Assembly itself.

Barrière, THÉODORE (1823-77), French dramatic author, born and died in Paris. He wrote over fifty plays, some of them in collaboration with other authors; the best known being *Les Filles de Marbre* (1853) and *Les Faux Bonshommes* (1856), his masterpieces. He created the character of the *raisonneur* (cf. his Desgenais), who is now found in many new French plays, accompanying the action as a sort of moralizing chorus. Other well-known plays by him are a clever dramatization of Murger's *La Vie de Bohême* (1851), his first great success, *Cendrillon* (1858), *Le Feu au Couvent* (1859), *Les Jocrisses de l'Amour*, and *Malheur aux Vaincus* (1865).

Barrier Reef. See GREAT BARRIER REEF.

Barrier Treaty, a treaty concluded in 1709 at the Hague between England and the Netherlands, by which the Netherlands republic obtained the right to occupy certain fortified places (Namur, Tournai, Menin, Furnes, etc.) in the Spanish Netherlands. In 1715 a similar treaty was concluded between the Netherlands and Austria. In 1830 these same fortresses became part of Belgium, and were mostly destroyed after the erection of the fortifications of Antwerp. See Willequet's *Histoire du Système*

de la Barrière (1847), and *Political History of England*, vol. ix. *passim* (1909).

Barrili, ANTONIO GIULIO (1836-1908), Italian writer, was born at Savona. After taking part in the military campaigns of 1859, 1866-67, he devoted himself entirely to literature, eventually becoming professor of Italian literature at the university of Genoa. He has published more than fifty novels, of which the early ones (simple tales of love, told in an admirable style) are the best—*Santa Cecilia* (1866), *Come un Sogno* (1875), *Val d'Olivi* (1873), *L'Olmo e l'Edera* (1877), etc. Several of his later works have been translated into English.

Barring Out, the practice of barring out the master from the schoolroom till he complied with the scholars' demands. A barring out at the High School of Edinburgh in 1595 cost the life of a magistrate. The custom was general in the north of England in the 17th and 18th centuries. Addison was leader of a barring out at Lichfield Grammar School (1685). Ormskirk Grammar School, Lancashire, was, early in the 19th century, the scene of a well-organized barring out. One of Miss Edgeworth's tales is founded on the custom.

Barrington, GEORGE (1755-c. 1840), whose proper name was WALDRON, was of Irish birth; early became a professional thief in London, and in 1790 was transported to Botany Bay. Released two years later, he rose to be high constable of Paramatta, N.S.W. A versatile author, he left *A Voyage to Botany Bay* (1801) and *Histories of New South Wales* (1802) and of New Holland (1808). See *Life, Times, and Adventures of George Barrington* (1820?). The oft-quoted line, 'We left our country for our country's good,' occurs in his prologue to Young's tragedy, *The Revenge*.

Barrington, JOHN SHUTE (1678-1734), son of a London merchant, was called to the bar (1699). His essay on *Protestant Dissenters* (1704-5) led to his being commissioned to proceed to Scotland, where he gained the Presbyterian interest in favour of the union of the two kingdoms. His *Dissuasive from Jacobitism* (1713) brought him the favour of George I. In 1720 he was made baron and viscount in Ireland. Twice returned to Parliament for Berwick-on-Tweed (1715 and 1722), he was expelled the House (1723) for his connection with a lottery.

Barrington, SAMUEL (1729-1800), British admiral, son of the preceding, served under Hawke in the Basque Road affair; in 1760 with Hon. J. Byron at Louisburg in Nova Scotia; and in 1761 with Keppel at Belle Isle. In command of the *Achilles*, he captured, in 1759, the *Comte de St. Florentine*. In 1778 he became commander-in-chief in the W. Indies, where he reduced St. Lucia, and defeated the French under D'Estaing. In the action off Grenada, in 1779, he was second in command to Byron, and in 1782 to Lord Howe at the relief of Gibraltar. He became an admiral in 1787.

Barrios, JUSTO RUFINO (1835-85), president of Guatemala, rose to the supreme military command under the administration of President Granados. He obtained the presidency in 1873, and held it until he met his death in the war with Salvador, Nicaragua, and Costa Rica.

Barrister, an advocate or pleader in the higher law courts and tribunals of England and Ireland. A barrister was originally entitled to plead a case by the side of his client at the bar which separates the court and its officers from the public. In England he must be called by one of the Inns of Court, after keeping

generally twelve terms at the inn by eating six (or, if a member of a university, three) dinners a term, passing examinations, and paying fees, including a stamp duty of £50. The benchers of the inn may refuse to call any individual to the bar, subject to an appeal to the judges, who are visitors of the inn, and originally had the right of calling to the bar. Barristers have an exclusive right of audience in the High Court and Court of Appeal, and may have the same right in quarter sessions on an order by the justices. They have a right to conduct their client's case, including a right to compromise it, and are not liable for mistakes or for negligence. They are privileged from arrest on their way to and from the courts. They may be guilty of contempt of court, and for any misconduct may be disbarred by the benchers of their inn. They cannot sue for their fees, even though the solicitor has received them; and they are not liable to return their fees, even though they cannot attend a case. In litigious business, etiquette requires that a barrister should be instructed by a solicitor. See ADVOCATES, FACULTY OF, the Scottish equivalent of barristers; KING'S COUNSEL; and INNS OF COURT.

Barros, JOÃO DA (1496-1570), Portuguese historian, called the 'Livy of Portugal.' In 1522 he was made governor of the colony of Elmina (Guinea), W. Africa, and in 1532 treasurer of India. Barros wrote the great historical work *Asia Portuguesa* (1552-63, 3 vols.), the discovery, conquest, and deeds of the Portuguese in India. It was this book which inspired Camoens to write his great poem *Os Lusíadas*.

Barrosa, vil., 15 m. S.E. of Cadiz, Spain; scene of the victory of the British, under Graham, over the French, under Victor (Mar. 5, 1811).

Barros-Arana, DIEGO (1824), Chilean historian and geographer, born at Santiago; has published a *Hist. of Chilean Independence* (1854-8); *Hist. of the War of the Pacific* (1881); *Hist. of Chile* (12 vols. 1884-93).

Barrot, CAMILLE HYACINTHE ODILON (1791-1873), French statesman, took an active part in the revolution of July 1830, and was one of the three commissioners who conducted Charles X. to Cherbourg. In 1840 he supported Thiers, but subsequently led an active opposition against Guizot and the conservatives, and was at the height of his popularity during the reform fever of 1847. He deplored the revolution of 1848, however, and after the flight of Louis Philippe supported the claim of the Count of Paris to the throne. Under Louis Napoleon he became president of the council; but the siege of Rome made him very unpopular, and he retired in 1851. In 1870 he was appointed president of the Decentralization Committee, and in 1872 councillor of state and vice-president of the Council. Barrot's *Mémoires Posthumes* (4 vols. 1875-6) attracted great attention.

Barrow (O.E. *beorh*, 'a little hill') is a term applied by antiquaries to the sepulchral mounds which are so numerous in the British Isles, and indeed throughout a great part of the world. Sometimes they are earthen mounds, sometimes heaps of stones or cairns; and in the latter instances the name *barh* (a variant of *beorh*) is usually applied to them in the Outer Hebrides. Their ground plan is in most cases round, although frequently it is oval; and in height and extent of superficies they vary in a marked degree. The largest specimen in England is Silbury Hill, 130 ft. high. 'The manner in which the dead have been disposed within them differs very considerably,' observes

Canon Greenwell, speaking of British barrows. 'Sometimes the body, whether burnt or unburnt, has been placed in the mound without anything to protect it from the surrounding earth or stones. Sometimes it has been placed in a small box of stone, a cist; at other times in the hollowed trunk of a tree, or in a grave sunk below the surface of the ground; and, when a burnt body, often in an urn; whilst in some instances the mound encloses a large structure, suggestive rather of an abode for the living than of a resting-place for the dead.' The Vikings were frequently buried in their ships, over which earth was piled up till a barrow was formed. The skulls found in the round barrows of Britain are usually brachycephalic; but Dr. Thurnam's 'round barrows, round skulls; long barrows, long skulls' cannot be unreservedly accepted. See Nilsson's *Primitive Inhabitants of Scandinavia* (Eng. trans. by Sir J. Lubbock, 1868), Greenwell's *British Barrows* (1877), Dall's *Cave Relics of the Aleutian Islands* (1878), Satow's *Ancient Sepulchral Mounds, Japan* (1880), and A. L. Lewis, *Jour. Anthropol. Inst.* (1890). See URN and CAIRN.

Barrow. (1.) River, Ireland, rises N. side of the Slieve Bloom Mts., Queen's Co., flows generally S.; joins the Suir about 29 m. from the sea, to form, as its estuary, Waterford harbour. Its chief tributaries are the Nore, Blackwood, and Greese rivers. Length, 119 m. Area of basin (including Suir), 3,555 sq. m. Navigable for vessels of 200 tons to New Ross, and for barges to Athy (70 m.), where it joins the Grand Canal. (2.) B. STRAIT, between Lancaster Sound and Melville Sound, Canada, 74° N., 90° to 100° W.; 40 m. broad. So named by Captain Parry (1879), after Sir John Barrow.

Barrow, ISAAC (1630-77), English mathematician and divine, born in London, was appointed (1660) professor of Greek at Cambridge. Two years later he was nominated to the chair of geometry at Gresham College, London, and subsequently (1663) became Lucasian professor of mathematics at Cambridge. This, again, in 1669 he resigned in favour of his pupil, Isaac Newton. He was appointed master of Trinity College in 1672, and then laid the foundation of the famous Trinity College Library; in 1675 he was vice-chancellor of the university. Barrow was a man of strong character, and an eloquent and vigorous preacher—his sermons, according to Hallam, displaying a strength of mind, a comprehensiveness, and fertility which have rarely been equalled. His mathematical works included three able treatises—*Lectiones Opticæ* (1674), *Lectiones Geometricæ* (1670), and *Lectiones Mathematicæ* (1685). The best edition of the English theological works was that by Napier (9 vols. 1859), with a memoir by Dr. Whewell, the editor in 1860 of his Latin mathematical works. See *Life of Barrow* (new ed. 1859), by Abraham Hill.

Barrow, SIR JOHN (1764-1845), English patron of Arctic exploration, was a poor, self-taught Lancashire boy. As secretary to Lord Macartney, he went with the first British embassy to China in 1792, and in 1797 was employed in the settlement of affairs at the Cape of Good Hope, of which colony he subsequently wrote a history. Lord Mulgrave appointed him in 1804 second secretary of the Admiralty, a post which he held for nearly forty years. In 1835 he was made a baronet. He was a great—perhaps the greatest—promoter of Arctic discovery, and the chief founder of the Royal Geographical Society (1830). American

other works, he wrote books of travel in China (1804), Cochin-China (1806), and S. Africa (1801-3); *Lives of Macartney* (1807), *Howe* (1838), *Anson* (1839), and *Peter the Great* (new ed. 1883); histories of modern Arctic exploration (1818 and 1846); and an autobiography (1847). See *Life* by Staunton (1852).

Barrow-in-Furness, munic. bor., parl. bor., co. bor., seapt., and manufacturing centre on the s.w. tip of detached portion of Lancashire, England, opposite Walney I., and 9 m. s.w. of Ulverston. Once a fishing village, Barrow has since 1847 made extraordinary progress owing to the discovery of pure hæmatite iron ore at Park, in the neighbourhood. The county borough (21,009 ac.) was incorporated in 1867, and has been several times enlarged. Furness Abbey forms a picturesque feature towards the N. The docks (280 ac. in extent) are four in number—Devonshire, Buccleuch, Ramsden, and Cavendish; the first two opened in 1867 and 1873 respectively. A part of the third is the Anchor Liner dock. The Cavendish is the timber basin, and is 142 ac. in extent. Shipbuilding and naval armament form important industries. The firm of Vickers Sons and Maxim, Ltd., have accommodation for building fifteen ships at a time. Some large Atlantic liners and several of the most powerful ships of the British and other navies have been built at Barrow. There are huge steel and iron works (Bessemer steel works dating from 1863), engineering shops, foundries, jute factories, paper and pulp works, etc. The imports include general merchandise, cattle (from Belfast), flour, grain, ore, timber, petroleum, naphtha, benzine, coal, and coke; the exports, iron ore, pig iron, steel rails, etc. Pop. (1847) 325; est. (1910) 65,000.

Barrow-upon-Soar, par. and vil., Leicestershire, England, 10 m. N. of Leicester; has limestone quarries, and is engaged in the manufacture of cement, hosiery, and lace. Pop. 2,500.

Barrulet, in heraldry, a diminutive bar, generally one-fourth of a bar in width.

Barry, in heraldry, is the term used when the field is divided by horizontal lines into an even number of equal portions. *Barry of six* is one of the most common of parted coats, both with straight and compound lines, in the armoury of all countries, and is borne by many great houses. *Barry-bendy* is the term used when a field is divided barwise and bendwise also, the tinctures being countercharged. *Barry-pily* is the name given to the field when it is divided by long narrow, pile-shaped indentations lying horizontally, or barwise, across it.

Barry, coast par. (5,328 ac.) and vil. of S. Forfarshire, Scotland, 8 m. N.E. of Dundee. There are extensive links where large artillery and volunteer camps are annually formed. Pop. (par.) 4,700.

Barry, seapt., Glamorgan, S. Wales, 7 m. by rail s.w. of Cardiff, and opposite the small island of Barry, in the Bristol Channel. The docks (the property of the Barry Docks and Railway Company) were opened in 1889. They are 114 ac. in extent, and have accommodation for the largest vessels afloat. Coal is exported. There are three large graving docks. Pop. 40,000.

Barry, ALFRED (1826-1910), late bishop of Sydney and primate of Australia (1884-9), born in London, the second son of Sir Charles Barry, architect. He was principal of Cheltenham College (1862-8), and of King's College, London (1871-81); canon of Worcester (1871-81), canon of Westminster (1881-4), and assist-

ant bishop to the diocese of London (1897). Published *Introduction to O.T.* (1850); *Boyle Lectures* (1876, 1877, 1878); *Christianity and Socialism* (1891); *Bampton Lectures* (1892); *Hulsean Lectures* (1895); *The Position of the Laity* (1903); and *The Christian Sunday: its History* (1904).

Barry, SIR CHARLES, R.A. (1795-1860), architect of the Houses of Parliament, Westminster, was born at Westminster, and in 1820 commenced practice as an architect in London. He was early entrusted with some notable buildings, including King Edward VI.'s Grammar School at Birmingham, and the Travellers' and Reform Clubs in Pall Mall; and in 1835 his design was accepted for the new palace of Westminster. He was knighted by Queen Victoria at the opening ceremony in 1852. He died before the whole building was completed, and was buried in Westminster Abbey. See *Life* by his son, Alfred Barry (1867).

Barry, MRS. ELIZABETH (1658-1713), English actress who, between 1673 and 1709, created no fewer than one hundred characters, both in tragedy and comedy, of which the most famous were Belvidera, in Otway's *Venice Preserved*; Zara, in Congreve's *The Mourning Bride*; and Lady Brute, in Vanbrugh's *The Provoked Wife*. Otway conceived for her a hopeless and pathetic passion. See Cibber's *Apology*, p. 133 *et seq.* (1741).

Barry, JAMES (1741-1806), Irish artist, a native of Cork, studied art under West of Dublin, and also as a protégé of Burke at Paris and Rome. He was elected R.A. in 1773. At the Academy he was appointed (1782) professor of painting, but was deprived of his office in 1799 for having made false accusations against several of the members. The mural paintings at the Society of Arts form his best work.

Barry, SIR JOHN WOLFE WOLFE, K.C.B. (1836), English engineer, born in London, the youngest son of Sir Charles Barry; entered the office of Sir John Hawkshaw, leaving in 1867 to undertake the Blackfriars, Kew, and Tower bridges over the Thames, the construction of the Barry docks, docks at Hull and Middlesbrough, and numerous railways in England, Scotland, India, and elsewhere. He has served on several royal commissions, including those on the port of London (1900-2) and on London traffic (1903-5). He was knighted in 1897, on the completion of the Tower Bridge. He has written *Railway Appliances* (1874-92), *Lectures on Railways and Locomotives* (1882), and *The Tower Bridge* (1894).

Barry, SIR REDMOND (1813-80), Australian judge and educationist, of Irish parentage, was called to the bar at Dublin (1838). Having settled in Melbourne, he rose to be first solicitor-general of the colony of Victoria (1850), and judge (1851). He was founder of Melbourne University (1854), its first chancellor (1855), and founder of the Melbourne Public Library, National Gallery and Museum (1853). Knighted in 1860.

Barry, SPRANGER (1719-77), Irish actor, was the son of a Dublin silversmith, which occupation he abandoned for the stage. He played (1744) in Dublin with immediate success, and then removed (1746) to London, where he became the friend, and later the rival, of David Garrick. 'Garrick,' it is said, 'commanded most applause, Barry most tears.' See Murphy's *Life of Garrick* (1801).

Barry Cornwall. See PROCTER.
Barry Railway Viaduct, across the Taff R., in Glamorganshire, Wales, spans two other railway lines and a canal; is 1,420 ft. long and 112 ft. high.

Bars-gemelles, or BARS-GEMEL, in heraldry, twin bars crossing the field, and placed so that the parts of the field above and below them are greater than the part between them.

Barsi, tn., Sholapur dist., Bombay Presidency, India, 43 m. N. of Sholapur. Pop. 24,000.

Barsine. (1.) Daughter of Artabazus, and wife of Memnon of Rhodes, after whose death she married Alexander the Great, and bore him a son, Hercules. Both she and her son were put to death by the orders of Cassandra in 309 B.C. (2.) Also called STATIRA, elder daughter of Darius III.; married Alexander at Susa (324 B.C.) After his death she was murdered, at Roxana's instigation.

Bar-sur-Aube, dist. tn., dep. Aube, France, 34 m. E. of Troyes, with manufactures of flour, brandy, and cotton. The site has been occupied since Roman times, and the town was destroyed by the Huns. Here, on Jan. 24 and Feb. 27, 1814, fierce battles took place between the Allies and the French. Pop. 4,500.

Bart, JEAN (1651-1702), French corsair, born at Dunkirk. Having, under Ruyter, taken part in the campaigns of 1666 and 1667 against England, he entered (1672) the service of France, and (1686) became captain. After performing many brilliant exploits as a cruiser in the Mediterranean and off the English coasts, he was appointed by Louis XIV. chief of a squadron in 1697, having previously obtained letters of nobility from the king for having captured a Dutch fleet laden with corn. See Vanderest's *Hist. de Jean Bart* (1844).

Bartas, GUILLAUME DE SALUSTE, SIEUR DU (1544-90), French Huguenot poet. His chief work, *La Semaine, ou Création du Monde* (1578), is said to have given ideas to Milton and Tasso. He served in diplomatic missions

to England, Scotland, and Denmark on behalf of Henry of Navarre. Joshua Sylvester's *Du Bartas: His Divine Weeks and Works* (1598) was once extensively read in America. See Pellissier's *Vie de Du Bartas* (1883).

Bartels, ADOLF (1862), a German man of letters, has lived as a journalist in Berlin and Weimar; has written *Geschichte der Deutschen Literatur* (1901-2), *Der Bauer in der Deutschen Vergangenheit* (1900), and a biography of *Jeremias Gotthelf* (1902), and edited the works of Klaus Groth (1899) and Hebbel (1900).

Bartenstein, tn., E. Prussia, 35 m. S.S.E. of Königsberg, on the Alle; has iron and machinery works. Pop. 7,000.

Barter. See ECONOMICS.

Bartfeld (Hung. *Bartfa*), tn. of Hungary, co. Saros, at the foot of the E. Beskid Mts., 28 m. by rail N. of Eperjes; is famous for its chalybeate waters, and as the meeting-place of the first general Protestant synod of Hungary. Pop. 6,000.

Barth, tn. in the Prussian prov. of Pomerania, dist. Stralsund, on the S. shore of the Barther Bodden (lagoon), 15 m. W. by N. of Stralsund, with a small harbour. Pop. 7,500.

Barth, HEINRICH (1821-65), German traveller, born at Hamburg. In 1845 he visited N. Africa, voyaged up the Nile, and explored Arabia and the provinces of Asia Minor. He was requested by the British government to take part in the expedition for the exploration of Central Africa, for which he set out in 1849, along with Mr. Richardson and Dr. Overweg. The explorations lasted for nearly six years; but after the death of his two companions, Barth returned to Europe in 1855, and in 1857 published his *Travels and Discoveries in North and Central Africa* (5 vols. 1857-9; new ed. 1890). In

1862 he explored Eastern Turkey. He also wrote *Wanderungen durch die Küstenländer des Mittelmeers* (1849), *Reise von Trapezunt nach Skutari* (1860), and several other works.

Barthélemy, AUGUST MARSEILLE (1796-1867), French political verse-writer, born at Marseilles. At Paris (1825) he attacked the Bourbons in a series of squibs, which were followed up by the *Villéliade* (1826), *Napoléon en Egypte* (1828), and *Fils de l'Homme* (1829), for which he was imprisoned, and, in conjunction with Méry, the *Dupinade* (1831). The revolution of July was celebrated by the two authors in *L'Insurrection* (1830). Thereafter he founded the *Némésis* (1831-2). His political changes he defended in the oft-quoted line, 'L'homme absurde est celui qui ne change jamais.'

Barthélemy, JEAN JACQUES (1716-95), French writer and scholar, born at Cassis, in Provence. In 1753 he was appointed keeper of the Royal Cabinet of Medals. His *Voyage du jeune Anacharsis en Grèce* (4 vols. 1787) occupied him thirty years. It obtained great popularity, and was translated into several languages—into English by W. Beaumont (5th ed. in 6 vols. 1817).

Barthélemy Saint-Hilaire, JULES (1805-95), French statesman and scholar, commenced his career as a journalist and politician, but in 1838 was appointed to the chair of Greek and Roman philosophy in the Collège de France, and member of the Academy (1839). After the revolution of 1848 he entered the Assembly, and was imprisoned on the *coup d'état*. On his release he resigned his professorship, and was not reinstated until 1862. He was elected to the Assembly at Bordeaux in 1871, and gave consistent support to Thiers, whose secretary he was in 1872-3. He was minister of foreign affairs

in Jules Ferry's cabinet (1880-1). His principal works are translations of Aristotle (1839-44), *L'Ecole d'Alexandrie* (1838), *Les Védas* (1854), *Du Bouddhisme* (1855), *Le Bouddha et sa Religion* (1866), *Mahomet et la Coran* (1867), *Pensées de Marc-Aurèle* (1876), *L'Inde Anglaise* (1887), *La Philosophie dans ses Rapports avec les Sciences et la Religion* (1889), and *François Bacon* (1890). Barthélemy Saint-Hilaire was the literary executor of Thiers and Victor Cousin, and wrote the *Life of the latter* (1895).

Barthez, PAUL JOSEPH (1734-1806), French physician, born at Montpellier, where he became professor of medicine in 1770, and chancellor of the university in 1785. His *Science de l'Homme* (1778) was translated into most European languages, and people came from all parts to consult him as a physician.

Barthold, FRIEDRICH WILHELM (1799-1858), German historian, born in Berlin; appointed professor of history at Greifswald on the publication of *Der Römerzug König Heinrichs von Lützelburg* (1830-1), his greatest work. Other publications were *Geschichte von Rügen und Pommern* (1839-45), and *Geschichte der Deutschen Städte und des Deutschen Bürgertums* (1850-2).

Bartholdi, FRÉDÉRIC AUGUSTE (1834-1904), French sculptor, of Italian descent; born in Colmar, Alsace. He was commissioned by the French government to execute a huge statue of Liberty (*Liberté éclairant le Monde*) for presentation to the American government in commemoration of the centenary of its independence. This statue, about 200 ft. high, was completed in 1884, and in 1886 was erected at the mouth of New York harbour (Bedloe's I.). Most of his other works have been of a quasi-historical or patriotic character—e.g. *The Lion of Belfort*

(1880), a monument to *Lafayette* in New York (1873), another to *Vercingetorix* at Clermont-Ferrand (1902), and *Helvetia carrying Help to Strassburg* (1895).

Bartholomé, PAUL ALBERT (1848), French painter and sculptor, born at Thiverval (Seine-et-Oise). Exhibited at the Salon from 1879-86 many *genre* pictures, the best being *The Meal of the Old People at the Workhouse* (1880) and *Recreation* (1885). Since 1891 he has exhibited in the same place statues, the best being *a Girl Weeping* (1892), and *Girl Praying* (1894). In 1899 his impressive series of sculptures, *Monuments to the Dead*, was bought by the city of Paris and placed in the Père-la-Chaise cemetery.

Bartholomew (son of Tolmai), one of the twelve disciples of Jesus, frequently, though not conclusively, identified with Nathanael. In the lists of apostles he is always associated with Philip. The later accounts of his preaching in India, Armenia, Egypt, etc., and the various stories of his martyrdom, are wholly untrustworthy.

Bartholomew, MASSACRE OF ST., the massacre of the Huguenots, which began at Paris on St. Bartholomew's day, Aug. 24, 1572. The atrocities in Paris, inaugurated by the murder of Coligny and Téligny, reached Orleans (Aug. 27), Lyons (Aug. 30), and Rouen (Sept. 17). Brantôme estimates the corpses thrown into the Seine at 4,000. Those massacred throughout France have been reckoned at 30,000, but modern historians tend to reduce them to about a fifth of that figure. Only sudden conversion saved Henry of Navarre and Condé. Gregory XIII. celebrated the massacre with a *Te Deum* and a specially-struck medal. See H. Baumgarten's *Vor der Bartholomäusnacht* (1882); H. White's *Mass. of St. Bartholomew* (1867); Pennington's *Epochs*

of the Papacy (1881); Mackinnon's *Growth and Decline of the French Monarchy* (1902); Stählin's *Sir Francis Walsingham und Seine Zeit* (1908)—Walsingham was in Paris during the massacre; and Acton's *History of Freedom and other Essays* (1907), 'Essay on Massacre of St. Bartholomew.' See also COLIGNY; CATHERINE DE' MEDICI; HENRY IV. OF FRANCE.

Bartholomew, EDWARD SHEFFIELD (1825-58), American sculptor, who studied at Rome. His most famous statues are *Blind Homer led by his Daughter, Gany-mede and the Eagle*, and *The Repentant Eve*. Hartford, Connecticut, has a large collection of his works. He died at Naples. See Leader Scott's *Sculpture: Renaissance and Modern* (1886).

Bartholomew Fair, an English market held annually from 1133 to 1840 in W. Smithfield, then up to 1855 at Islington, London, on the festival of St. Bartholomew (Aug. 24, old style). Originally connected with the church, miracle plays and mysteries were represented, and in early times it was the principal cloth fair in England—leather, pewter, and cattle being also extensively sold. Shows of all kinds attracted large crowds, till, in 1855, the fair was abolished as a nuisance. See Ben Jonson's comedy of this name, and H. Morley's *Memoirs of Bartholomew Fair* (1859).

Bartholomew's (St.) Hospital, Smithfield, London, founded in 1123 by Rahere, also founder and prior of the adjoining priory, the church of which is now known as St. Bartholomew the Great. It was made a sanctuary by Edward II.; but both hospital and priory were dissolved by Henry VIII., who refounded the hospital in 1547. It was rebuilt in 1730 to 1766. Attached are a medical school, founded in 1843, for which new buildings were opened in

1881; and a Convalescent Home at Swanley, Kent (1885), with 70 beds. The further extension and rebuilding of the hospital were decided upon in 1904, and in 1905 new out-patients' and casualty departments were commenced.

Bartizan, a term first used by Sir Walter Scott, to denote a small overhanging turret, with loopholes and embrasures, projecting from an angle of tower or wall: a characteristic feature of the so-called Scottish-baronial style of architecture.

Bartlett, SIR ELLIS ASHMEAD (1849-1902), politician, son of a Dissenting minister at Plymouth, Mass., was born at Brooklyn. He was a brother of Mr. Burdett-Coutts, M.P. He was called to the bar (1877); became M.P. for Eye (1880), and for Ecclesall Division, Sheffield (1885-1902); and served as civil lord of the Admiralty (1885-92). He was knighted in 1892. A Conservative and Russophobe, he was the champion of the Sultan of Turkey in the House of Commons. In 1897 he was captured by a Greek warship as a suspected spy. He published in the same year *The Battlefields of Thessaly*.

Bartlett, JOHN RUSSELL (1805-1886), American author and statesman. A banker at Providence, and a successful foreign book seller in New York, he was (1850-3) appointed one of the commissioners for the delimitation of the Mexican frontier. (See his interesting narrative in 3 vols., 1854.) Secretary (1855-72) of Rhode I., he published the *Records of the Colony from 1636 to 1790* (1856-65); *Index to Printed Acts, 1758-1862*; *Progress of Ethnology* (1848); *Dict. of Americanisms* (4th ed. 1877); and *Bibliotheca Amer.* (1865-71).

Bartoli, ADOLFO (1833-94), Italian literary historian, born at Fivizzano; held the professorship of literary history at the Florentine Institute of Higher Studies

from 1874 till his death. His principal work is the *Storia della Letteratura Italiana* (7 vols. 1878-88), which remained a fragment, breaking off with the 14th century. It was the first critical history of Italian literature, though it is now to some extent superseded by the work of Gaspari. He also edited Marco Polo (1859), dealt with the evolution of the renaissance (1877), and with the predecessors of Boccaccio (1878), and in 1881 published *Scenari Inediti della Commedia dell'Arte*.

Bartoli, TADDEO (1363-1422), Italian painter, born at Siena. He painted frescoes depicting the life of the Virgin, in the cathedrals of Siena, Pisa, Perugia, and Genoa; others are in the municipal palace in Siena (1414). One of his earliest works, *The Virgin among the Saints* (1390), is now in the Louvre. Among his other works are altar-pieces in the cathedral, Montepulciano (1401), in the Sardi chapel of S. Francesco, Pisa (1395). See Kugler's *School of Painting in Italy* (1851).

Bartolini, LORENZO (1777-1850), Italian sculptor, was born at Vornio, near Florence, and came to Paris in 1797. Here the bas-relief *Cléobis and Biton* established his fame. He was a favourite of Napoleon, of whom he executed a bust, and who entrusted him with the establishment of a school of sculpture at Carrara in 1808. After Waterloo he retired to Florence, where he died. Among his many works the most celebrated are the group of *Charity, Hercules and Lichas*, *Faith in God*, and *Pyrrhus hurrying Astyanax from the Walls of Troy*. He also executed busts of Byron, Thiers, and Pius IX.

Bartolommeo DI PAGO DEL FATTORINO, FRA (1475-1517), one of the greatest of Florentine painters, known also as BACCIA DELLA PORTA. Born at Savigliano, near Florence, he studied

under Cosimo Rosselli and Leonardo da Vinci. Fired by Savonarola's eloquence, he gave up his profession, burned his nude studies in the public square, and finally took the habit of the Dominicans. In 1498-9 he painted the celebrated fresco of the Last Supper in Santa Maria Novella, in Florence, finished in the lower part by Albertinelli. In 1506 Raphael visited Florence, and a strong friendship grew up between the two artists. In 1514 Fra Bartolommeo went to Rome, and there he painted the figure of St. Peter, and part of a St. Paul finished by Raphael. Fra Bartolommeo's influence on Italian art was fourfold: he preceded Raphael in a scientific system of composition, based on principles of strict symmetry; he combined harmony of tone with brilliancy of colour; he elaborated his landscape backgrounds beyond the practice of his contemporaries; and he was the inventor of the lay-figure. His finest work is characterized by calm beauty and adoration. His best work is in Florence and in Lucca (especially the beautiful *Madonna and Saints* in the cathedral). In the National Gallery, London, a *Virgin and Child with St. John* is attributed to him. See Leader Scott's *Fra Bartolommeo* (1880); Vasari's *Lives of Italian Painters* (1895); Kugler's *Schools of Painting in Italy* (1851).

Bartolozzi, FRANCESCO (1728-1813), Italian engraver, born at Florence; produced a series of engraved portraits for Bottari's *Vasari* (1756-60). In London (1764) he became engraver to George III. An original R.A. (1769), he executed from Cipriani's design the Academy's diploma, still in use, and gave vogue to stipple engraving. In 1802 he became director of a school of engraving at Lisbon. His works number over seven hundred.

Among the best are *Clytie* and *Silence*, after Annibale Caracci; *Virgin and Child*, after C. Dolci; *Venus, Cupid, and Satyr*, after L. Giordano. Among his portraits are *Clive* and *Thurlow*. He was the grandfather of Madame Vestris. See A. W. Tuer's *Bartolozzi and his Works* (2nd ed. 1885), and J. T. Baily's *Francesco Bartolozzi* (1907).

Barton, ANDREW (d. 1511), was the father of the Scottish navy. He is called Sir Andrew Barton in the popular ballad on his career. His mercantile transactions were considered piracy by the English and Portuguese, though protected generally by Scottish letters of marque. He was shot in a sea fight with the English.

Barton, BERNARD (1784-1849), the 'Quaker poet,' was a native of Carlisle. He first engaged in trade, but afterwards became a bank clerk at Woodbridge, in Suffolk, where he worked for forty years. His poems (1812, 1818, 1820) are distinguished by pious sentiment, pathos, and tenderness. He is chiefly known, however, as the friend of Charles Lamb. See *Letters and Poems* (1849; new ed. 1860), edited by his daughter, with a Memoir by Edward Fitzgerald.

Barton, CLARA (1830), a native of Oxford, Mass., U.S.A., who devoted herself to the care of the sick and wounded during the American civil war, and afterwards was associated with the work of the International Red Cross Society during the Franco-German war (1870-1). Miss Barton had charge of the Red Cross operations during the war in Cuba (1898), and in the Anglo-Boer war (1899-1902) in S. Africa. She is president of National First Aid Association (since 1906), and holds decorations and diplomas of honour from nearly every continental country. She has written *History of the Red Cross in Peace and War* (1898) *Relief*

of *Galveston* (1900), and *Story of Red Cross* (1904).

Barton, RIGHT HON. SIR EDMUND, K.C. (1849), Australian statesman, born near Sydney, N.S.W. After a distinguished career in the legislative assembly of his native colony from 1879, in the course of which he held several important offices, including that of Speaker (1883-7) and attorney-general (1889, 1891), he was (1901-3) prime minister and minister for external affairs in the first Australian Federal cabinet, the Federation Act of 1900 having been due largely to his untiring advocacy. In 1902 he represented Australia at the coronation of Edward VII. in London and in the Colonial Conference. He then received the honour of knighthood and the freedom of the city of Edinburgh. He has been Senior Puisne Judge of the High Court of Australia since 1903.

Barton, ELIZABETH (1506-34), the 'Maid of Kent.' A servant at Aldington in Kent, she recovered from an illness in a hysteric condition, and, under priestly influence, gave herself out (1525) as a prophetess, and delivered, as a revelation, the warning that should Henry VIII. persist in carrying out his divorce from Catherine of Aragon, he would not survive the act seven months. Events falsified her prediction, she confessed the imposture, and was executed at Tyburn. See Burnet's *Hist. of the Reformation in England* (1737).

Barton, SIR GEOFFRY (1844), British soldier, entered the army in 1862; went through the Ashanti war of 1873-4; five years later he was in the Zulu war. In the Egyptian war of 1882 he fought at Kassassin and Tell-el-Kebir. He served in the Sudan campaign of 1885; and on the outbreak of the Boer war (1899-1902) was appointed to the command of the 6th Brigade. Barton bore a dis-

tinguished part in the final attack on the Tugela position (Feb. 27, 1900). He received the C.B. and C.M.G., and in 1906 was knighted.

Barton Clay is well known for the number, variety, and excellent preservation of its fossil shells, belonging chiefly to genera characteristic of warm seas. They are mostly molluscs—*Voluta*, *Conus*, *Murex*, *Fusus*, *Phorus*, etc. The beds are well exposed in the sea cliffs of Barton in Hampshire, and belong to the highest division of the Eocene strata. See Bristow's *Geol. of I. of Wight* (2nd ed. revised by Reid and Strahan, 1889).

Barton-upon-Humber, town, Lincolnshire, England, 6 m. S.W. of Hull; carries on tanning, and manufactures bricks, tiles, pottery, and sailcloth. Pop. 5,700.

Barton-upon-Irwell (10,824 ac.), par., Lancashire, England, on R. Irwell, 5½ m. W. of Manchester. Here the Bridgewater Canal is carried over the Manchester Ship Canal by a large swing aqueduct. Pop. 8,000.

Bartsch, KARL (1832-88), Germanic and Romance scholar, was custodian of the Germanic Museum at Nuremberg (1855), and then occupied the chair of Germanic and Romance philology at Rostock (1858) and at Heidelberg (1871) successively. He edited a number of early German texts, and wrote several treatises on Germanic, of which the most important is the *Untersuchungen über das Nibelungenlied* (1865). In Romance, his two Provençal Chrestomathies (4th ed. 1882) and the similar work for Old French (5th ed. 1884) have been much used. Indispensable to the student of Provençal is the *Grundriss zur Geschichte der prov. Litt.* (1872). As a translator he rendered into German, among other works, Burns's songs and ballads (1865), Dante's *Commedia* in the original metre (1876), and Old

French popular songs (1882). His version of the *Nibelungenlied* reached a second edition in 1880.

Bartsia, in botany, a genus of the order Scrophulariaceæ, including three British species—red bartsia, found by the roadsides and in moist ground; yellow bartsia, confined to marshy ground on the west coast; and the rare purplish blue alpine bartsia, found in hilly districts in the north of England and Perthshire. These plants, like some others of the same order, are semi-parasitic and feed on grass roots, into which they send suckers.

Barttelot, MAJOR EDMUND MUSGRAVE (1859-88), son of Sir W. Barttelot Barttelot, distinguished himself in Afghanistan and Egypt; accompanied H. M. Stanley on the expedition for the relief of Emin Pasha, and is supposed to have been murdered by Manyema carriers. For refutation of charges of cruelty brought against him, see the *Life* written by his brother (1890).

Baru, a fluffy, cotton-like fibre obtained from an E. Indian sago palm; used instead of feathers to stuff pillows, and as a substitute for tow in calking boats.

Baruch ('blessed'), the friend and amanuensis of Jeremiah. He shared many of the prophet's misfortunes, notably his exile in Egypt, and subsequently, according to Josephus (*Antiq.*, X. ix. 7), in Babylon. Bunsen erroneously identifies Baruch with the 'great unknown' prophetic writer of Isa. 40-66. See Jer. 32, 36, etc.; Cheyne's *Jeremiah: his Life and Times* (1888); and the two following articles.

Baruch, a book of the Apocrypha, purporting to have been written in the main by the above. It falls into four parts—(1) ch. 1:1-14, a historical introduction, quite unreliable; (2) 1:15-3:8, confession and prayer of the captives in Babylon, probably from

a Hebrew original, and dating from the 3rd century B.C.; (3) 3:9-4:4, a eulogy of wisdom, addressed to the exiles, from about 70 A.D.; and (4) 4:9-5:9, odes celebrating the return from captivity, still later. These heterogeneous elements were joined together probably towards the close of the 1st century A.D. Attached to Baruch (as ch. 6) is the Epistle of Jeremy. See Gifford's commentary in *Speaker's Apocrypha* (1891).

Baruch, THE APOCALYPSE OF, a remarkable work, made known to scholars by the discovery of a 6th-century Syriac MS. in 1866. The friend of Jeremiah is made to speak throughout in the first person, and relates the divine disclosures made to him in Jerusalem. The work comes from four or five different hands, probably Pharisees, and assumed its present form about the first quarter of the 2nd Christian century. It was translated into Latin by Ceriani in 1866, which version is reprinted by Fritzsche in his *Lib. Vet. Test. Græc.*, pp. 654-699. See R. H. Charles's *Apocalypse of Baruch* (1896), and W. J. Deane's *Pseudepigrapha*, pp. 130-62 (1891).

Barvas, par. and two vils., Isle of Lewis, Hebrides, Scotland, 12 m. N.W. of Stornoway. Pop. 7,000.

Barwick, JOHN (1612-64), dean of St. Paul's, born in Westmorland. In the civil war he adhered to the Royalist cause, for which he suffered imprisonment (1650-2). At the restoration he was made dean of Durham (1660), and later dean of St. Paul's (1661). See *Life* (in Latin) by Peter Barwick, trans. by H. Bedford (1724).

Barwood. See CAMWOOD.

Barye, ANTOINE LOUIS (1796-1875), one of the greatest of French sculptors. He served in the army from 1812 to 1814. For years he fought against poverty and opposition, till recognition of his

talent came from America through his friend Mr. Walters, whose beautiful art collection at Baltimore contains many of his finest bronzes, such as *The Orleans Group*, *The Hunt of the Wild Ox*. Barye was unexcelled in illustrating groups of animals in life-like action, the best example being his *Lion Struggling with a Snake* (1832). Another notable work is the *Lion Resting* (1847). Both are in the Tuileries. Barye also, in the specimens on the façade of the new wing of the Louvre (*War, Peace, Force, Order*), treated the human figure in heroic sculpture with equal mastery. See Brownell's *French Art* (1892); Gruelle's *Notes on the Walters Collection, Baltimore*; and Ballu's *L'Œuvre de Barye* (1890).

Barytes, a mineral consisting of sulphate of barium, and known also as 'heavy spar' from its high sp. gr. (4.5), which is exceptional for a mineral without metallic lustre. It crystallizes in the rhombic system, in forms of great diversity, and is generally white, gray, or pink, but the crystals may be transparent and colourless. Its hardness is $3\frac{1}{2}$, and it has a very good cleavage. One of the commonest of veinstones, it usually accompanies silica and ores of lead. Very fine specimens, lining cavities, are obtained at Dufton in Westmorland. It occurs not only in crystals, but also, more frequently, in fibrous, granular, stalactitic and other forms. It is used as a source of barium preparations; as a paint when finely ground, alone or mixed with white lead; and occasionally as an ornamental stone.

Baryton, or VIOLA DI BARDONE, a stringed instrument, invented in 1700, but not now in use, somewhat resembling the viola da gamba. Leopold Mozart eulogized its beauty of tone, and Haydn, who tried hard to learn it, left 175 compositions for the instrument.

Basalt, one of the most abundant and widely distributed igneous rocks, covering large districts in the north of Ireland, west of Scotland, Germany, America, India, Africa. From many active volcanoes—*e.g.* Etna, Vesuvius and those of Iceland and the Sandwich Islands—it is emitted in lava flows, sometimes of vast extent. Basaltic rocks are usually black or very dark when fresh and may be fine-grained (often called anamesite), or contain large scattered porphyritic crystals of olivine, augite, and plagioclase felspar, with a finer-grained ground mass between them. Their minute structure, as shown in microscopic sections, varies greatly; the ground mass consisting of augite, plagioclase, and magnetite, with often a considerable quantity of residual non-crystalline glassy matter. Some basalts contain leucite in large, gray rounded crystals—*e.g.* many of the lavas of Vesuvius—and are known as leucite basalts; the nepheline basalts contain nepheline. Dolerite and diabase are closely allied to basalt, but are more coarsely crystalline, and of somewhat different structure. As a group the basalts are typical lavas of basic character—*i.e.* they contain a relatively small proportion of silica, and much magnesia, iron, and lime. Their dark colour is due to the abundance of augite and magnetite, the latter being often present in sufficient quantity to attract a magnetic needle and to interfere with the exactness of surveyors' instruments. Native iron in large masses occurs in the basalt of Ovifak in Greenland. A feature of basaltic lava flows is their columnar jointing which produces the characteristic scenery of the Giant's Causeway and Fingal's Cave.

Baschi, comm., Perugia province, Italy, on the Tiber, 24 m. N.W. of Terni. Pop. 6,300.

Base, in chemistry, is not a term that admits of very exact definition, but includes those oxides and hydroxides of metals and alkyls, ammonia and its substitution derivatives, that react with acids to form salts. The term is relative: thus a weak base may behave as an acid towards a strong base, and as a base towards a strong acid. All soluble bases dissociate in solution to metallic, or complex, ions and hydroxyl (OH) ions.

Base, in heraldry, the lower portion of a shield. Charges borne therein are blazoned *in base*, and particularly in *dexter base*, *middle base*, or *sinister base*, according as they appear to the right, the centre, or the left.

Base, MILITARY. See LINES OF COMMUNICATION.

Base-ball, an outdoor game having a superficial resemblance to the British 'rounders.' Base-ball dates from 1845, and has for the past forty years been as much the national game of the United States as cricket and football are the national games of Great Britain. There are comparatively few genuine amateur base-ball clubs of importance, the majority of organizations, other than those of frankly professional constitution, being dependent upon 'gate' receipts. The majority of clubs in the large American cities belong to this semi-professional class, and form a recruiting ground for the regular professional clubs. There is, however, in New York a leading and purely amateur association, the Amateur League of New York, which embraces six noted clubs largely composed of retired college players.

In 1871 the first professional base-ball association was established in New York, and was followed in 1876 by the formation of the National League of Pro-

fessional Base-ball Clubs. After a somewhat troubled history, this became, in 1892, the great major league of the professional class, and is to-day, in co-operation with the American association, responsible for the issue of rules, and for base-ball legislation generally, so far as professional players are concerned. But base-ball professionalism in America is, as regards individuals, on quite a different footing from cricket and football professionalism in Great Britain. It is no uncommon thing to find among professional base-ball teams college students, lawyers, artists, and others pursuing avocations in which education and special talent are required.

Base-ball is played with bat and ball upon a diamond-shaped ground, at one point of which is the home base, the remaining three points being 1st, 2nd, and 3rd bases respectively.

A game is played by two sides, each consisting of nine players. An inning is completed when three men on the batting side are out, and a game consists of nine innings played by each side. If the score be a tie at the end of nine innings, play shall be continued until one side has scored more than the other in an equal number of innings. The batsman takes his position in the batsman's box at the home base, armed with a round hard-wood bat not exceeding $2\frac{3}{4}$ in. in diameter at the thickest part, nor exceeding 42 in. in length. To him the pitcher, standing in front of the pitcher's plate, delivers a ball weighing not less than 5 nor more than $5\frac{1}{4}$ oz. avoirdupois, and measuring not less than 9 nor more than $9\frac{1}{4}$ in. in circumference. The batsman must strike at every ball that passes over any portion of the home base not lower than the batsman's knee nor higher than his shoulder.

After three failures to hit the ball the batsman is 'out,' provided that the ball on the third occasion is caught by the catcher before it touches the ground or is thrown to first base before he reaches there. The batsman's endeavour is to hit the ball inside the foul lines in such a manner as to enable him, without being put out, to run round the bases in a variety of ways according to the rules. After making a successful hit, and when he has been given four bad balls or has been hit by the pitcher, the batsman becomes a base-runner, and is said to have scored a run after running the 120 yds. necessary to enable him to touch 1st, 2nd, 3rd, and home bases in succession without being put out in the process. When the first base is earned, subsequent bases may be secured by clever 'stealing,' which demands great quickness of perception and promptitude of movement even more than fast running. An extremely important feature of scientific base-ball is effective pitching, to excel in which a considerable amount of 'head work' is necessary, coupled with a practical knowledge of speed, and experience in the use of the various 'curves,' 'drops,' and other niceties of delivery. In base-ball language, good pitching is said to show skill in 'box work,' while the essence of good batting is 'team work at the bat.'

Base-ball has made considerable headway in Canada, having for years flourished in Toronto, and latterly spread among the French Canadians in Quebec. It has also become popular in Australia, and is played by several 'nines' in France. But in England it has made slow progress everywhere except in Derbyshire, where in 1900 there were five clubs. Spalding's *Official Base-ball Guide* (issued monthly), published by the American Sports

Publishing Co., New York, is the recognized authority on the game and contains the latest rules approved by the National League.

Basedow, JOHANN BERNHARD (1723-90), German educational reformer, taught for some time Sorö in Denmark, and was professor at a school in Altona from 1761-71. His ideas were appreciated by Leopold of Anhalt, who invited him to Dessau as an educationist. He was thus enabled to realize a cherished plan and opened his Philanthropinum in 1774. Owing to his violent temper and lack of business capacity he had to surrender the direction of it in 1778, and the school was closed in 1793. In spite of this apparent failure, it was Basedow who did most to hasten a reform in the educational system of Germany. In his earliest writings there is much to suggest Rousseau; and on the publication of the *Emile* (1762) Basedow became Rousseau's most enthusiastic champion. The keynote of his system was 'everything according to nature.' The most important of his numerous works are the *Methodenbuch für Väter und Mütter* (1770) and the *Elementarwissenschaften* (1774). See *Biographies* by L. Fischer (1890) and R. Diestelmann (1897).

Basedow's Disease.

GOITRE.

Basel, or BÂLE (the common English form *Basle* is wrong) (1.) Canton, N.W. Switzerland, originally consisting of the city of Basel; entered into full membership of the Confederation in 1501 and was divided (1833) into two portions—Urban Basel and Rural Basel. Area, 177 sq. m. Population, 210,000, mainly German-speaking and Protestant. Rural Basel is chiefly agricultural, but has 56 sq. m. of forests and 1,100 acres of vineyards. The N. frontier of the canton is formed by the Rhine. (2.) Cap. of ab-

second in population and probably the richest of Swiss towns; consists of Great Basel on s. bk. and Little Basel on N. bk. of the Rhine. The former contains a 14th-century minster, a 15th-century town hall, and a university (founded 1459, and with about 700 students); the latter has a silk-ribbon industry. It is noted for its metal and chemical industries, and its extensive works for obtaining electric power from the Rhine, and an important railway centre. Erasmus lived and died here (1536). Anciently called Robur, the town took the name of Basilia in 374 A.D. Here were signed in 1795 two treaties of peace—(1) On April 5, whereby Prussia ceded to France all her territories on the l. bk. of the Rhine; (2) on July 22, whereby France restored the *status quo* of Spain, and received part of Santo Domingo. The Basel Confession of Faith of the Swiss Reformed Church was promulgated here in 1534. The earthquake of 1356 destroyed most of the city. The great church council of Basel (see below) sat in the choir of the minster. Pop. 135,000.

Basel, COUNCIL OF (1431-43), was the last of the three reforming church councils held in the 15th century; but its decisions are not accepted by the canonists at Rome. It was summoned by Pope Martin V., but met under his successor, Eugenius IV. The chief object was to find some common ground for reconciliation with the Hussites, by promoting internal reforms in the church. Its reforming zeal was obnoxious to the Pope, who ordered it to dissolve. Eventually it came into such bitter opposition to the Pope that it voted his suspension from the functions of his office in 1438, declared him a heretic in 1439, and later in the same year elected a rival pope, Felix V. Its last session was held in 1443, by which

time its power and influence had dwindled away; and in 1449, after the death of Eugenius and the resignation of Felix, the schism was ended by the general acceptance of Pope Nicholas V., who confirmed the acts of the council. See *Concilium Basiliense* (ed. Haller, 1896-1900), and *Cambridge Modern History*, vol. i.

Base-line, or **BASE**, in surveying, is a straight line measured on the ground, from the two ends of which angles can be taken with the purpose of laying down a triangle or triangles, thus mapping out the country to be surveyed. The base, or base-line, must be measured with the most rigid accuracy, for upon it the accuracy of the entire survey depends.

Basey, pueblo, Philippine Is., near the s.w. point of Samar I. Pop. 14,000.

Bashahr, tributary hill state in Punjab, India. Area, 3,862 sq. m. Pop. 85,000.

Bashan, an extensive region of ancient Palestine lying to the E. of the upper Jordan, and divided from Gilead on the s. by the river Hieromax or Yarmuk. Og, its king, having been defeated and slain by the Israelites (Num. 21:33 f.), his territory was assigned to the half-tribe of Manasseh. Bashan (properly The Bashan—*i.e.* 'rich earth') is a fertile table-land, broken by volcanic cones, both sporadic and grouped, and furrowed by deep valleys, some 2,000 ft. above sea-level. It was famous for its oak forests (Ezek. 27:6) and for its cattle—*cf.* the 'bulls' and the 'kine' of Bashan (Ps. 22:12; Amos 4:1).

Bashi-bazouks, Turkish irregular troops, who serve without uniform or direct pay, are usually mounted, and are addicted to pillage. They were notorious in the Bulgarian atrocities of 1876.

Bashkires, or **BASHKIRS**, people inhabiting Ural slopes, Russia; Ural-Altai in origin,

Mohammedan in religion; partly nomadic, partly settled; Tartars in habits and speech. Their wealth consists chiefly in horses; from the milk of the mares they prepare *kumiss*. They number over three-quarters of a million.

Bashkirtseff, MARIE (1860-84), Russian painter, born of noble family near Poltava. After making the tour of Europe, she settled at Paris. Devoting herself from 1878 with inordinate enthusiasm to art, she exhibited the *Umbrella* (1882), *Jean et Jacques* (1883), *The Meeting* (1884), now in the Luxembourg. She had real genius, though immature. Her *Journal* (1887), translated into English (1890), and *Further Memoirs* (1901), reveal the inner life of a profoundly emotional, egotistic, and unbalanced nature. See *Catalogue des Œuvres*, with preface by F. Coppée (1885).

Basi, or **BUSI**, tn., Punjab, India, 25 m. s.w. of Patalia. Pop. 14,000.

Basidium. See FUNGI.

Basidu, or **BASSADORE**, port at s.w. end of isl. of Kishm, Strait of Ormuz, Persian Gulf; belongs to Great Britain.

Basil, various herbaceous plants of the order Labiatae. Wild basil (*Calamintha clinopodium*) and common basil (*C. officinalis*) are natives of Great Britain. *Ocimum basilicum* is sweet basil, a native of India; the whole plant is fragrant and of a sweet taste, the young leaves being used for seasoning dishes, and the leafy stems cut and dried for winter use. Holy basil (*O. sanctum*) is another Indian species. Bush basil is *O. minimum*, and is cultivated like sweet basil. Basil vinegar is made by steeping basil plants in vinegar, which absorbs and retains their flavour. Sweet basil occurs in the old story of Isabella and the Pot of Basil, which has been the subject of works by Boccaccio, Keats, and several painters.

Basil, ST., THE GREAT (about 329-79), one of the fathers of the Greek Church, born at Cæsarea, of which he became bishop (370). He was much involved in the religious controversies of the time, an insight into which is afforded by his letters to Gregory Nazianzen, with whom he was united in tender friendship. He resolutely opposed Arianism. Threatened by Valens with exile and death if he did not open the churches to the Arians, he continued inflexible. To him is largely due the triumph of monachism over the hermit life. He embellished Cæsarea, and raised in it numerous workshops and schools. The works he has left include the *Hexameron*, *Ascetic Reading of Profane Authors*, and *365 Letters*. His efforts at reforming the services of the church were embodied in the liturgy which bears his name, and is still in use in the East. There is a Benedictine edition of his works in 3 vols. (1739), and a complete French translation of his works in 12 vols. by Roustan (1847).

Basil, two Byzantine emperors. (1.) **BASIL I.** (867-886), born at Adrianople, assassinated Michael III. and seized the throne. Basil was founder of the Macedonian dynasty, and his reign opens a new era in the history of the Byzantine empire. (2.) **BASIL II.** (957-1025), Byzantine emperor, only six years old at the death of his father, Romanus II., became emperor in 976. For nearly thirty years (990-1018) he carried on a protracted struggle against Samuel, king of Bulgaria. For the ruthless severity with which he finally destroyed his rivals he was called the 'Slayer of the Bulgarians.' He converted to Christianity Vladimir, the prince of Kiev (998).

Basilan, isl. in Sulu Archipelago, Philippine Is., s.w. of Mindanao; 300 sq. m. in area; mount-

tainous; valuable teak forests; pearl fisheries. Cap., Isabella. Pop. 8,000.

Basilica. (1.) The ancient basilica was that part of the palace wherein justice was administered to the people. These structures were first erected by the Romans in 184 B.C., and continued to be built by them to the end of the 3rd century A.D. They consisted of a long central hall or nave, with aisles—the aisles being separated from the nave by pillars supporting the roof. At the end of the nave was a dais for the judges, who sat in a semicircular recess called an apse. The name was afterwards transferred to the first buildings for Christian worship. It is also applied by Palladio to those buildings in the cities of Italy which are analogous to English town halls. (See APSE, ARCHITECTURE—*Basilicas*.) (2.) A code of laws begun by the Byzantine emperor Basil I., and completed by his son Leo VI., who issued it in sixty books in 887. In it was embodied much of Justinian's *Corpus Juris Civilis*. A good edition is *Basilicorum Libri LX. Gr. et Lat.*, issued by Heimbach (1833–1850). See Haubold's *Manual Basilicorum* (1819), and Montreuil's *Histoire du Droit byzantin*.

Basilicata, the ancient Lucania, compartimento, S. Italy, coincident with the province of Potenza (name used since 1871), stretching from the head of the Gulf of Taranto N.W. through the middle of Italy. It pastures sheep and cattle, and produces grain, wine, fruits, olive oil, and timber. Area, 3,845 sq. m. Pop. 475,000. Chief town, Potenza.

Basilides, founder of the Basilidian sect of the Gnostics, lived under the Emperors Trajan and Hadrian in Alexandria. He is the apostle of 'the Abraxas religion' and the doctrine of 'emanation.' From the Supreme Power,

Abraxas, emanated mind; from mind, the word; from the word, providence; from providence, virtue and wisdom; from these two, principalities and powers; and from them, an infinity of angels—who, in turn, created the heavens, 365 in number. It is from this number (365) that the name Abraxas is formed, as its letters, according to the Greek computation, make up 365. The later Basilidians became more and more imbued with the philosophy of the Stoics, and they abandoned altogether that obedience to the moral law which their master strongly inculcated. See ABRAXAS.

Basilikon Doron, a work on the art of government, written (1599) by James VI. of Scotland for his son Prince Henry, and memorable as containing the king's own statement of the doctrine of divine right.

Basilisk, the name given by the Greeks and Romans to a fabulous monster possessed of many marvellous attributes, its glance alone being sufficient to kill, and its breath being the concentration of the most deadly poisons. It has been applied by zoologists to certain American tree-lizards which, despite their hideous appearance, are both harmless and edible. In *Basiliscus mitratus* the head is covered by a scaly, distensible cap, the so-called helmet.

Basim, munic. tn. in Berar, India, 145 m. S.W. of Nagpur; alt. 1,758 ft. Pop. 14,000.

Basin. A geological basin is found where the beds of rock dip or incline inwards on every side towards a centre, and is a form of syncline. Most of the British coal fields are basins; these are often very unsymmetrical, though in the S. Wales and Lanarkshire coal fields the structure is well shown. The uppermost beds occupy the centre of the area, while the edges or outcrops of the lower beds form more or less perfect

circles around them; thus, the coal measures are surrounded by areas of millstone grit, and outside these by carboniferous limestone. The beds were laid down in horizontal sheets, the basin structure subsequently developing by folding. See COAL MEASURES.

Basingstoke, par., munic. bor., and mrkt. tn., Hampshire, England, 14 m. s.w. of Reading, on G.W. and L.S.W.R.; is the centre of an agricultural district, and has manufactures of agricultural implements. There are also breweries and cloth factories. The Basingstoke Canal, 37 m. long, begins here. The castle was burned by Cromwell in 1645. Acreage, 4,172. Pop. 10,000. See Baigent's *History* (1889).

Baskerville, JOHN (1706-75), English printer, born at Wolverley in Worcestershire. Without any special training he started type-founding (1750) and printing in Birmingham. His books are chiefly reprints, including Virgil (1757), Milton (1758), Juvenal and Perseus (1761), Addison (1761), Horace (1770), and a Bible and Greek New Testament (1763). He also invented vellum paper.

Basket, a vessel made of willows, osiers, twigs, or splits interwoven, mentioned frequently in the Bible, and represented in the monuments of ancient Egypt. The ancient Britons were famed for their baskets, which found favour in Rome after the occupation of Britain.

For the ordinary basket in modern use osiers and willows are generally used. These are either taken entire, cut from the root, split asunder, or only stripped of their bark, according to the nature of the work to be produced; in the latter case they are previously well soaked. The stripping is performed by drawing the willows through an iron-edged instrument called a 'brake,' which removes the bark, and the willows

are then cleaned by means of a sharp knife. Next they are exposed to the sun and air, and afterwards placed in a dry situation. It is not less necessary to preserve willows with their bark in the same manner, submitting them, previous to use, to a thorough soaking in water for several days. The barked or white osier is then divided into bundles or fagots, according to size, the larger being reserved to form the strong work in the skeleton of the basket, and the smaller for weaving the bottom and sides. Should the latter be applied to ordinary work, they are taken whole; but for implements of slight and finer texture, each osier is divided into 'splits' and 'skeins.' Splits are osiers cleft into four parts by an implement consisting of two edge tools placed at right angles, whereby the rod is longitudinally divided down the pith. These are next drawn through a machine resembling the common spoke-shave, keeping the grain of the split next the wood or stock of the shave; while the pith is presented to the edge of the iron, which is set in an oblique direction to the wood. In order to bring the split into a shape still more regular, it is passed through another instrument called an 'upright,' consisting of a flat piece of steel, each end of which is fashioned into a cutting edge like that of an ordinary chisel. The flat is bent round, so that the two edges approach each other at a greater or less interval by means of regulating screws, and the whole is fixed in a handle. By passing the splits between the two edges they are reduced to skeins, the thickness of which is determined by the interval between the edges of the tool.

The implements required by a basket-maker are few and simple. In making an ordinary basket, the osiers are laid out in a length

considerably greater than that of the finished work. They are ranged in pairs on the floor parallel to each other, at small intervals, in the direction of the longer diameter; and this may be called the woof, for basket-work is, in fact, a web. These parallel rods are then crossed at right angles by two of the larger osiers, with the thick ends towards the workman, who places his foot upon them, and weaving each alternately over and under the parallel pieces first laid down, he confines them in their places. The whole now forms what is technically called the 'slat' or slate, which is the foundation of the basket. Next, the long end of one of the two rods is taken and woven under and over the pairs of short ends all round the bottom, until the whole is woven in. A similar process is applied to the other rod, and then additional long osiers are interwoven until the bottom is of the desired size, and the woof is occupied by them. Thus the bottom, or foundation on which the superstructure is to be raised, is completed, and this latter part is accomplished by sharpening the large ends of as many long and stout osiers as may be necessary to form the ribs or skeleton. They are forced or plaited between the rods of the bottom, from the edge towards the centre, and are turned up in the direction of the sides; then other rods are woven in and out between each of them, until the basket is raised to the requisite height. The brim is finished by turning down the perpendicular ends of the ribs, while a handle is made by forcing two or three osiers, sharpened at the end, down the weaving of the sides, close together. They are then pinned fast about two inches from the edge. After the osiers have been bound or plaited the basket is complete.

In many parts of the world houses, fences, and gates are formed of basket or wicker work; as also are screens, chairs, and trays. On the Continent there is still in use the Holstein wagon, composed of basket-work. Not a century ago the same material was employed in Britain for the bodies of gigs, and for an appendage of the stage-coach, which was called 'the basket.' In the United States a basket-work of rattan is, for its lightness, still used in the bodies of sleighs and pony phaetons. See *Journal of Soc. of Arts* (1907).

Basket Ball is a popular game which James Naismith devised in 1891, in the United States. It is played in a space not exceeding 3,500 sq. ft., and oblong in shape. The opposing teams, each of five members, endeavour to throw the ball into the basket defended by the other, on much the same principle as that of football. The 'basket' is a net suspended at a height of 10 ft. from the ground, and the ball is an inflated bladder with a diameter of about 10 in.

Basket-Fish, a group of the Echinodermata, the latter including also star-fishes, sea urchins, etc. The basket-fish belongs to the Ophiuroida, but is distinguished by the peculiar and elaborate ramification of its arms. Its body, which is five-sided, is 2 or 3 in. broad, while its arms are about 12 in. long. Its name is derived from its habit of folding its branching arms around itself when threatened, so that it resembles a basket. It is found in various parts of the ocean, especially in tropical waters.

Basking Shark (*Selache maxima*), the largest shark of the Atlantic, exceeds thirty feet in length. It does not attack man unless molested, but feeds on small fishes. The liver yields oil, and the shark, which is not rare in British seas, especially off the west coast of Ireland, is hunted on