

The best work on Roger Bacon is undoubtedly that of E. Charles, *Roger Bacon, sa Vie, ses Ouvrages, ses Doctrines d'après des textes inédits*, 1861. Against the somewhat enthusiastic estimate and modern interpretation given in this work, Schneider in his *Roger Bacon, Eine Monographie*, Augsburg, 1873, has reclaimed. He points out very clearly certain aspects in which Bacon appears as a mere scholastic. The new matter contained in the publications of Charles and Brewer was summarised by H. Siebert, *Roger Bacon: Inaugural Dissertation*, Marburg, 1861. Cf. also, J. K. Ingram, *On the Opus Majus of Bacon*, Dublin, 1858; Cousin, *Fragments, Phil. du Moyen Age* (reprinted from *Journal des Savans*, 1848); Saisset, *Précurseurs et Disciples de Descartes*, pp. 1-58 (reprinted from *Revue de Deux Mondes*, 1861); Prantl, *Gesch. der Logik*, iii. 120-129 (a severe criticism of Bacon's logical doctrines). (R. AD.)

BACONTHORPE, or BACON, JOHN, called The Resolute Doctor, a learned monk, born towards the end of the 13th century, at Baconthorpe, a village in Norfolk. After spending the early part of his life in the convent of Blakeney, near Walsingham, he removed to Oxford, and from that city to Paris, where he obtained great reputation for his learning, and was esteemed the principal of the Averroists. In 1329 he returned to England, and was chosen twelfth provincial of the English Carmelites. In 1333 he was sent for to Rome, where, we are told, he first maintained the Pope's sovereign authority in cases of divorce; but this opinion he is understood to have afterwards retracted. He died in London in 1346. His chief work was published in 1510, with the title *Doctoris resoluti Joannis Baconis Anglici Carmelite radiantissimi opus super quatuor sententiarum fibris*, 4 vols. folio; it has passed through several editions. The little that is known of this schoolman, who in his own day and order had a reputation rivalling that of Thomas Aquinas, may be seen in Brucker, *Hist. Crit.*, iii. 865; Stöckl, *Phil. d. Mittel.* ii. 1044-5; Hauréau, *Phil. Scol.*, ii. 476; Prantl, *Ges. d. Logik*, iii. 318.

BACSANYI, JANOS, a Hungarian poet, was born at Tapozeza, May 11, 1763, and died at Linz, May 12, 1845. In 1785 he published his first work, a patriotic poem, *The Valour of the Magyars*. In the same year he obtained a situation as clerk in the treasury at Kaschau, and there, in conjunction with other two Hungarian patriots, edited the *Magyar Museum*, which was suppressed by the Government in 1792. In the following year he was deprived of his clerkship; and in 1794, having taken part in the conspiracy of Bishop Martinovich, he was thrown into the state prison of the Spielberg, near Brünn, where he remained for two years. After his release he took a considerable share in the *Magyar Minerva*, a literary review, and then proceeded to Vienna, where he obtained a post in the bank, and married. In 1809 he translated Napoleon's proclamation to the Magyars, and, in consequence of this anti-Austrian act, had to take refuge in Paris. After the fall of Napoleon he was given up to the Austrians, who allowed him to reside at Linz, on condition of never leaving that town. He published a collection of poems at Pesth, 1827 (second edition, Buda, 1835), and also edited the poetical works of Anyos and Faludi.

BACTRIA, or BACTRIANA, an ancient country of Central Asia, lying to the south of the River Oxus, and reaching to the western part of the Paropamisian range, or Hindu Kush. It was sometimes regarded as including the district of Margiana, or Merv, which was more frequently considered as distinct. The character of the country is very various, and has been well described by Curtius, whose account is confirmed by the few modern travellers who have passed through it. Some portions are remarkable for the beauty of their scenery, or the fertility of the soil, evidenced by a rich and varied vegetation, while other parts are stretches of barren and drifting sands. In early history Bactria is connected with some of the most important movements of the Indo-European races, and has no small claims to be regarded as the cradle of our present civilisation. Accord-

ing to Persian tradition, it became the seat of the Iranian wanderers, who established the religion of Zoroaster, and expelled the Vedic inhabitants of the country. In the 7th century B.C. it passed under the dominion of the Medes, and not long after formed part of the conquests of Cyrus. In the reign of Darius it ranked as the twelfth satrapy of the empire, and furnished valuable contingents to the imperial army; these are described at a later date by Herodotus as wearing the Median head-dress, and making use of their native bows and short spears. Like the rest of Western Asia, Bactria was subjugated by Alexander, and formed part of the empire of the Seleucids; but in the 3d century B.C. it was raised to the rank of an independent kingdom by the successful revolt of Diodotus, the Greek satrap. There thus arose a remarkable dynasty—if dynasty it can be called—of Græco-Bactrian kings, who have been the object of much modern investigation, but are not as yet arranged in any satisfactory order. The names of seven or eight of them are known from the Greek and Roman historians, and upwards of forty are preserved on their coins. The great problem to be solved by numismatists is how to dispose of so many claimants in the comparatively narrow space of time at their disposal. It is highly probable that many of them held contemporaneous sway in different parts of the Bactrian region, sometimes with a distinct preponderance on the part of one, and sometimes with practical equilibrium of power; but their geographical distribution can only be conjectured from what are understood to be mint-marks on their coins. The period of the final disintegration of the Græco-Bactrian power is not definitely ascertained; but as early as the time of Eucratides (160 B.C.) there appears on the coinage the so-called Bactrian Pali, a language cognate with Sanskrit but written in characters of seemingly Phœnician origin. Besides these monetary legends, several Bactrian inscriptions have been recently discovered, among the most important of which are the "Taxila" copperplate, which has furnished the key to the Bactrian numeral system, the Peshawur vase, the Manikyala cylinder, the Bimaran vase, and the Wardak urn, but none of them are of very much historical value. Bactria seems to have passed successively under the power of various Saca and Parthian and so-called Indo-Scythian rulers, and during the first six or seven centuries of the Christian era it became one of the most important centres of Buddhist monasticism. (See BALKH.) Its modern history is of but little importance, as it has never formed an independent kingdom of any power or stability.

See Bayer, *Hist. Reg. Græco-Bactr.*, Petrop., 1738; Köhler, *Méd. grecques des Rois de la B.*, St. Pet., 1822-3; Tychsen, *Comm. Recen. Götting.*, v. vi.; Tod, in *Roy. Asiatic Soc. Trans.*, 1824; Schlegel, in *Journ. Asiat.*, 1828; Prinsep, in *J. of Asiatic Soc. Bengal*, 1833-38; Raoul-Rochette, in *Jour. des Savants*, 1834-39 and 1844; Jacquet, in *J. Asiat.*, 1836; Masson, in *J. of Asiatic Soc. Bengal*, 1836; K. O. Müller, in *Göttingen Anzeigen*, 1835 and 1838; Mionnet, in *Supplément viii. to his Description, &c.*, 1837; Lassen, *Zur Gesch. der Griech. u. Indoskyth. Kön.*, Bonn, 1833; Grotefend, *Die Münzen der Kön. v. Bactr.*, Hanover, 1839; Wilson, *Ariana Antiqua*, 1841; Cunningham, *Numism. Chron.*, viii. 1843; Lassen, *Indische Alterthumskunde*, vol. ii., 1852; Babu Rajendra Lal, in *J. Asiat. Soc. of Bengal*, 1861; E. Thomas, "Bactrian Coins," in *J. Roy. Asiatic Soc. Gr. Brit. and I.*, 1873; Dowson, "B. Pali Inscr.," *ibidem*.

BACUP, a town of England, in Lancashire, 20 miles N. from Manchester. It is situated in a beautiful valley on the River Speddon, and is a station on the East Lancashire railway. It is chiefly important for its factories, foundries, and mills, as well as for the coal-mines in the neighbourhood. Since 1841, when the population of the chapelry was only 1526, Bacup has rapidly increased, and its sanitary condition has been greatly improved by the exertions of a local board. The river has been deepened for a mile above the town, and a water supply has been secured by means of a reservoir at Higher Stacks. There are two Episcopal

churches and several dissenting places of worship, a mechanics' institute and library, and various other institutions. A new market-hall was built in 1867. Population of local board district in 1871, 17,199.

BADAJOS, a province of Spain, forming, by the division of 1833, the southern half of the old province of Estremadura, or what is generally called Lower Estremadura. It is bounded on the N. by Cáceres, E. by Ciudad Real, S. and S.E. by Cordova, Seville, and Huelva, and W. by Portugal, embracing an area of 8687 square miles. See ESTREMADURA.

BADAJOS, the capital of the above province, is a fortified city, and the see of a bishop. It is situated about 5 miles from the Portuguese frontier, on a slight elevation near the left bank of the Guadiana, and is one of the principal stations on the railway between Madrid and Lisbon. The height is crowned by the ruins of a Moorish castle. A strong wall and bastions, with a broad moat and outworks, and forts on the surrounding heights, make the city a place of great strength. The river is crossed by a magnificent granite bridge, originally built in 1460, repaired in 1597, and rebuilt in 1833. The city is well built, and contains an arsenal, a cathedral, built like a fortress and bombproof, several churches, hospitals, and schools. Its monasteries are all secularised, one being occupied as infantry barracks; and some of its nunneries are closed. Badajos was finally taken from the Moors in 1235 by Alphonso IX., and from its importance as a frontier garrison has since been the scene of numerous sieges. The last and most severe was in 1812, when it was stormed by the British troops under Wellington and carried with dreadful loss. The town was delivered up to a two days' pillage. It had been surrendered the previous year to Soult by the treachery of Imaz, the commander of the garrison. The trade and manufactures of Badajos are considerable, and much contraband traffic is carried on with Portugal. Badajos is the birthplace of the painter Luis de Morales and of Manuel Godoy. Pop. 22,895.

BADAKHSHAN, a country of Central Asia, situated in the upper valley of the Kokcha river, one of the principal head streams of the Oxus. The name has been variously spelt Badascian, Balacian, Balakhshan, Balashan, Balaxien and Balaxia. Including Wakhan, it lies between 35° 50' and 38° N. lat., and between 69° 30' and 74° 20' E. long. The chief ascertained positions are as follows: Faizábád, 37° 2' N., 70° 36' E.; Ishkashm, 36° 45' N., 71° 38' E.; Punja, 37° 5' N., 72° 39' E.; and Karkat Yassin lake, 37° 14' N., 74° 18' E. Its extent from east to west is about 200 miles, and from north to south about 150 miles. On the north it is bounded by Kulab and Darwaz; on the east by the lofty table-land of Pamir; on the south by the Hindu Kush range; and on the west by Kunduz. The Pamir land is the principal watershed of Asia, and Badakhshan forms part of the western water slope constituting the basin of the Oxus. The country is for the most part mountainous, but there are numerous plains and fertile valleys. The general slope of the country is great, since Kunduz is probably not more than 500 feet above the level of the sea, while Lake Victoria, close to the principal watershed, is estimated at 15,600 feet.

Badakhshan comprises 16 districts. The principal district called Faizábád is under the rule of the Mir Mahmúd Shah; the others are dependencies ruled by relatives of the Mir, or by hereditary feudatories. Each ruler is independent, but is bound to aid the Mir of Faizábád in time of need. The Mir himself pays tribute to the Amir of Cabul. The other districts besides Faizábád are Daraim, Shahr-i-buzurg, Gumbuz, Farakhar, Kishm, Rustak, Rushán, Shighnán, Ishkashm, Wakhán, Zebak, Minján, Ragh, Daung, and Asiábá. Each district has its sub-divisions. In Faizábád there are several fertile tracts; amongst them are the hilly regions of Yaftal and Shewá, which are thickly popu-

lated, the former by Tajiks, and the latter by Turks of the Jakha Moghal tribe; and the plateaus of Argú and Shewá, of which the former is somewhat higher than the plain of Faizábád, about 15 miles in length by about 8 in breadth, and well cultivated, while the latter is still higher, and forms the best and largest pasture ground in Badakhshan. A lake named Sir-i-kol, about 20 miles in circumference, is situated on the Shewá plateau. In and around Faizábád there are numerous excellent fruit and flower gardens; the principal manufactures are cast-iron pots, boots and shoes, and a material woven from silk and cotton, called *ilacha*. The district of Jirm, also subject to Mahmúd Shah, comprises numerous rich valleys, as well as the famous mineral region called Yamgan, or "all mines." The mines yield rubies, lapis lazuli, lead, alum, sal-ammoniac, sulphur, copper, &c. The annual yield of lapis lazuli averages about £1500, which is sold at the rate of seven shillings per pound; it is exported to Russia, Kashmir, and China. The Dasht-Baha-rak is an extensive plain in this district, on which was formerly situated a large city, once the capital of Badakhshan. There are several villages on it, as also the summer residence of the Mir. The caravan route from India to Faizábád passes over this plain. The districts of Rustak, Ragh, Kishm, Daraim, and Shahr-i-buzurg are next in importance as regards fertility and population. They abound in fertile hills and plains. The principal cultivated products are wheat, rice, *Cicer arietinum*, *Phaseolus Mungo*, cotton, linseed, poppy, sesame, apples, grapes, mulberries (which form the principal article of food in these regions), pears, apricots, walnuts, melons, gourds, turnips, radishes, carrots, spinach, leeks, as also numerous garden flowers and timber trees. The districts of Minjan and Rushan are more mountainous, have a cooler climate, and are more sparsely populated than the foregoing. Their inhabitants are also distinct, differing in physical features, creed, language, and habits. The celebrated ruby mines are in Ishkashm; they have not been worked for more than 30 years, except temporarily in 1866. It is, however, suspected that they are worked surreptitiously by the people. They yield the well-known Balas (*i.e.*, Badakhshan) ruby.

The principal domesticated animal is the yak. There are also large flocks of sheep, cows, goats, ponies, numerous fine dogs, and Bactrian camels. The more important wild animals are a large wild sheep (*Ovis poli*), foxes, wolves, jackals, bears, boars, deer, and lions; amongst birds, there are partridges, pheasants, ravens, jays, sparrows, larks, a famous breed of hawks, &c.

Badakhshan proper is peopled by Tajiks, Turks, and Arabs, who speak the Persian and Turki languages, and profess the orthodox doctrines of the Mahometan law adopted by the Sunnite sect; while the mountainous districts are inhabited by Tajiks, professing the Shia creed, and speaking distinct dialects in different districts.

Badakhshan was visited by Hwen Thsang in 630 and 644. The Arabian geographers of the 10th century speak of its mines of ruby and azure, and give notices of the flourishing commerce and large towns of Waksh and Khotl, regions which appear either to have in part corresponded with or to have lain close to Badakhshan. In 1272-73 Marco Polo and his companions stayed for a time in Badakhshan. During this and the following centuries the country was governed by kings who claimed to be descendants of Alexander the Great. The last of these kings was Shah Mahomet, who died in the middle of the 15th century, leaving only his married daughters to represent the royal line. Early in the middle of the 16th century the Uzbeks obtained possession of Badakhshan, but were soon expelled, and then the country was generally governed by descendants of the old royal dynasty by the female line. About the middle of the 18th century the present dynasty of

Mirs established its footing in place of the old one which had become extinct. In 1765 the country was invaded and ravaged by the ruler of Cabul. During the first three decades of the present century it was overrun and depopulated by Kokan Beg and his son Murad Beg, chiefs of the Kataghan Uzbeks of Kundus. The country was still suffering from these disasters when Wood visited it in 1837. When Murad Beg died, the power passed into the hands of another Uzbek, Mahomet Amir Khan. In 1859 the Kataghan Uzbeks were expelled; and Mir Jahander Shah, the representative of the modern royal line, was reinstated at Faizabad under the supremacy of the Afghans. In 1867 he was expelled by the Afghans and replaced by the present ruler, Mir Mahomet Shah, and other representatives of the same family. According to the latest accounts the country was reviving from its past misfortunes, and the towns were again rising. Badakhshan owes part of its prosperity to the baneful traffic in slaves. A strong man is considered a fair exchange for a large dog or horse, and a fine girl for about four horses. The district is of some political interest in connection with the frontier line of Afghanistan, which has recently been the subject of discussion between the Russian and British Governments.

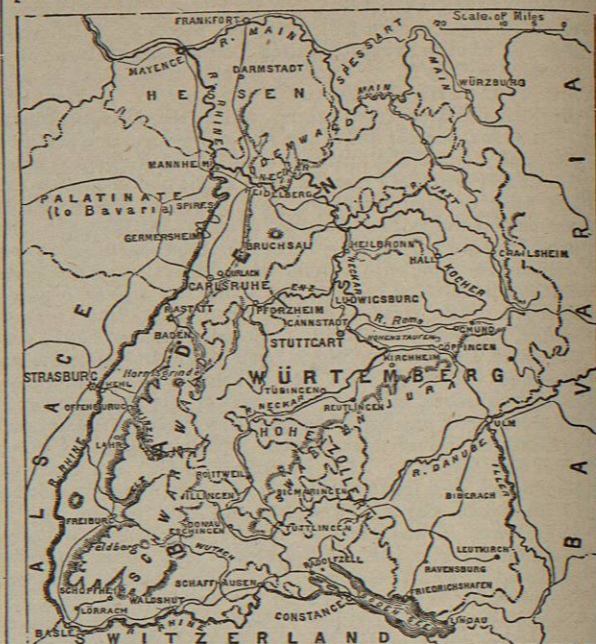
In 1867 a report on Badakhshan was drawn up by the Pundit Mun-phool after a sojourn of two or three years in the country. For further information, see the *Book of Ser Marco Polo*, vol. i. 1871, edited by Col. Yule; *A Journey to the Source of the River Oxus*, by Capt. J. Wood, edition of 1872; "Report on the Mirza's Expedition from Cabul to Kashgar," by Major Montgomerie, in the *Journal of Roy. Geo. Soc.*, vol. xli. p. 132; "A Havildar's journey through Chitral to Faizabad in 1870," by Major Montgomerie, in journal last mentioned, vol. xlii. p. 180; "Papers connected with the Upper Oxus Regions," by Col. Yule, in the same volume, p. 438; "Monograph on the Oxus," by Maj.-Gen. Sir H. C. Rawlinson, in the same volume, p. 482; and a paper by the writer last mentioned, "On Badakhshan and Wakhan," in the *Proceedings of the Roy. Geo. Soc.*, vol. xvii. p. 108.

BADALOCCHIO, Sisto, surnamed ROSA, a painter and engraver, was born at Parma in 1581, and died in 1641 or 1647. He was of the school of Annibale Carracci, by whom he was highly esteemed for design. His principal engravings are the series known as *The Bible* of Raffaele, which were executed by him in conjunction with Lanfranc, another pupil of Carracci's. The best of his paintings, which are few in number, are at Parma.

BADEN, THE GRAND DUCHY OF, is situated in the S.W. of Germany, between 47° 32' and 49° 52' N. lat., and between 7° 27' and 9° 50' E. long. It is bounded on the N. by Bavaria and Hesse-Darmstadt; W. by Rhenish Bavaria, Alsace, and Lorraine; S. by Switzerland; and E. by Würtemberg and part of Bavaria. At the commencement of the present century Baden was only a margraviate, with an area little exceeding 1300 square miles, and a population of 210,000. Since then it has from time to time acquired additional territory, so that its area now amounts to upwards of 5800 square miles, and its population to nearly a million and a half.

It consists of a considerable portion of the eastern half of the fertile valley of the Rhine, and of the mountains which form its boundary. The mountainous part is by far the most extensive, forming, indeed, nearly 80 per cent. of the whole area. From the Lake of Constance in the south to the River Neckar is a portion of the so-called Black Forest or *Schwarzwald*, which is divided by the valley of the Kinzig into two districts of different elevation. To the south of the Kinzig the mean height is 3100 feet, and the loftiest summit, the Feldberg, reaches about 4780 feet; while to the north the mean height is only 2100 feet, and the Belchen, the culminating point of the whole, does not exceed 4480. To the north of the Neckar is the Odenwald range, with a mean of 1440 feet, and, in the Katzenbuckel,

an extreme of 1980. Lying between the Rhine and the Dreisam is the Kaiserstuhl, an independent volcanic group, nearly 10 miles in length and 5 in breadth, the highest point of which is 1760 feet.



Sketch Map of the Grand Duchy of Baden.

The greater part of Baden belongs to the basin of the Rhine, which receives upwards of twenty tributaries from the highlands of the duchy alone; a portion of the territory is also watered by the Main and the Neckar. A part, however, of the eastern slope of the Black Forest belongs to the basin of the Danube, which there takes its rise in a number of mountain streams. Among the numerous lakes which belong to the duchy are the Mummel, Wilder, Nonnenmattweiher, Titti, Eichener, Schluch, &c., but none of them are of any size. The Lake of Constance, or Boden See, belongs partly to Bavaria and Switzerland.

From 1819 to 1832 Baden was divided into six circles, which were reduced in the latter year to the four following:—The Lake Circle or Constance, the Upper Rhine or Freiburg, the Middle Rhine or Karlsruhe, and the Lower Rhine or Mannheim. This division, though still employed, has been legally supplanted by one into the eleven circles of Constance, Villingen, Waldshut, Freiburg, Lörrach, Offenburg, Baden, Karlsruhe, Mannheim, Heidelberg, and Mosbach. The capital of the duchy is Karlsruhe, which in 1871 had a population of 36,582; the other principal towns are Mannheim (39,614), Freiburg (24,599), Heidelberg (19,988), Pforzheim (19,801), Rastadt (11,559), Baden (10,083), Constance (10,052), Bruchsal (9786), and Lahr (6710). The population is most thickly clustered in the north and in the neighbourhood of the Swiss town of Basel.

The mineral wealth of Baden is not very great; but the mines of Oberwert, Kandern, &c., produce excellent iron; there are two zinc mines and one of lead; coal is worked at Diesburg, Zunsweier, Baden, &c.; and silver, copper, gold, cobalt, alum vitriol, and sulphur are also obtained in small quantities. Gold washing, at one time extensively carried on along the Rhine, is now little practised. Peat is found in abundance, as well as gypsum, china-clay, and

potter's earth. The duchy was formerly dependent on France for its salt supply, but extensive salt works have for a number of years been maintained by the Government at Dürreheim and Rappenan. In 1874 the amount produced was of the value of £54,880. The mineral springs of Baden are very numerous, and have acquired great celebrity,—those of Baden-Baden, Badenweiler, Antogast, Griesbach, Friersbach, and Petersthal, being the most frequented.

The inhabitants of Baden are of various origin,—those to the N. of the Murg being descended from the Alemanni, and those to the S. from the Franks, while the Swabian plateau derives its name and its population from another race. This distinction is still marked in the manners, the language, and the dress of the different districts. The majority of the people are engaged in agricultural and pastoral pursuits, for which much of the country is well adapted. In the valleys the soil is particularly fertile, yielding luxuriant crops of wheat, maize, barley, spelt, beans, potatoes, flax, hemp, hops, beet-root, and tobacco; and even in the more mountainous parts rye, wheat, and oats are extensively cultivated. There is a considerable extent of pasture land, and the rearing of cattle, sheep, pigs, and goats is largely attended to. The culture of the vine has recently been increasing, and the wines, which are characterised by a mildness of flavour, are in good demand. The gardens and orchards supply abundance of fruits, especially almonds and walnuts; and the keeping of bees is common throughout the country. A greater proportion of Baden than of any other of the South German states is occupied by forests. In these the predominant species are the fir and pine, but many others, such as the chestnut, are well represented. A third, at least, of the annual supply of timber is exported, the chief consumer being Holland, though of late years Paris has derived a considerable supply from this source.

The manufactures of Baden were formerly very insignificant, but have greatly increased since its accession to the Zollverein in 1835. They are, however, chiefly confined to iron and hardware goods, and the spinning and weaving of cotton. The latter industry is principally carried on at Ettlingen, Offenburg, St. Blaise, Zell, Schopfheim; Mannheim has an extensive manufacture of mirrors, and Karlsruhe of machines; while Pforzheim is famous for its production of jewellery and goldsmiths' work. Beet-root sugar is manufactured at Waghäusel more largely than anywhere else in Germany. Paper, leather, and tobacco are also important objects of industry. The inhabitants of the Black Forest have long been celebrated for their dexterity in the manufacture of wooden ornaments and toys, watches, clocks, musical boxes, organs, &c. Of clocks alone about 600,000 are made every year.

The exports of Baden, which coincide largely with the industries just mentioned, are of considerable importance, but the bulk of its trade consists in the transit of goods. The country is well furnished with roads and railways, the greater proportion of the latter being in the hands of the state. A line runs the whole length of the land, for the most part parallel with the Rhine, while branches cross obliquely from east to west.

The educational institutions of Baden are numerous and flourishing, and public instruction is largely subsidised by the Government. There are two universities, the Protestant one at Heidelberg, founded in 1386, and the Catholic one at Freiburg, founded in 1457. The library at Heidelberg numbers 150,000 volumes, and that at Freiburg 100,000, while there is another of almost equal size at Karlsruhe. There are also lycæums at Karlsruhe, Constance, Freiburg, Heidelberg, Mannheim, Rastadt, and Wertheim; several gymnasiums; normal schools, at Karlsruhe, Ettlingen, and

Meersburg, besides upwards of 2000 common schools established throughout the country. There is an institution in Pforzheim for the deaf and dumb, and one in Freiburg for the blind. The polytechnic school at Karlsruhe is among the most efficient institutions of the kind in Germany. The preparatory course extends over three years, and includes French, German, English, special history, mathematics, drawing, modelling, chemistry, mineralogy and geology, mechanics, &c. The special courses are engineering, architecture, forestry, chemistry, mechanics, commerce, and post-office service, and extend over from one to four years. The ducal family of Baden belong to the Protestant section of the Church, but the majority of the population are Roman Catholics. The returns of the census of 1871 are as follows:—Catholics, 942,560; Protestants, 491,008; other sects, 2265; and Jews, 25,703. The district where the Roman Catholic preponderance was greatest was Constance, while the Protestants were slightly more numerous in the district of Mannheim.

The government of Baden is an hereditary monarchy, with the executive power vested in the grand duke, and the legislative authority in a Parliament consisting of two Chambers. The upper Chamber is composed of all the princes of the reigning line who are of age, the chiefs of ten noble families, the possessors of hereditary landed estates worth £25,000, the Roman Catholic archbishop of Freiburg, the president of the Protestant Church, a deputy from each of the universities, and eight nominees of the duke. The lower Chamber consists of 63 representatives, of whom 22 are elected by the burgesses of certain towns, and 41 by the inhabitants of the bailiwicks. The parliamentary candidate must possess tax-paying property of the value of 10,000 florins (£833), or derive a salary of at least £125 from a public office. Every citizen, if neither criminal nor pauper, has the right of voting, but only in the choice of deputy-electors, by whom the real election of the representatives is decided. The members of the lower House are elected for eight years, and meetings of Parliament must take place every two years.

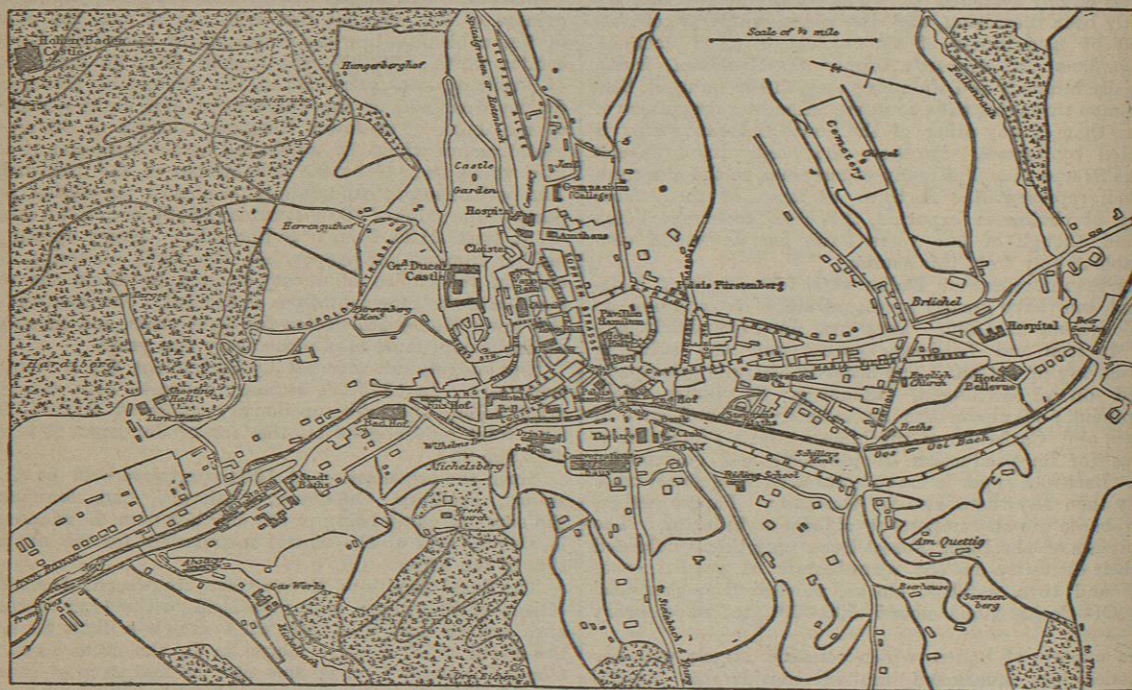
The budgets are granted by Parliament for a term of two years. In 1875 the ordinary expenses were rated at £1,572,959, and the ordinary receipts at £1,557,108. The total public debt on the 1st of January 1874 was £12,985,067.

Since the organisation of 1864 courts are held at Constance, Freiburg, Offenburg, Karlsruhe, and Mannheim, the supreme court being in the city last named. Mannheim is also the seat of the central commission for the navigation of the Rhine.

The ducal family of Baden traces its descent from the counts of Zähringen, who flourished in the 11th century, and derived their title from what is now a little town to the north of Freiburg. Hermann I., the second son of Count Berthold I., took the title of margrave of Hochberg in Breisgau, and was succeeded in 1074 by his son Hermann II., who was the first to style himself margrave of Baden. On the death of the Margrave Christopher in 1527, his estates were divided among his three sons, but one of them having died soon after, the two survivors became the sole inheritors, and founded the two lines of Baden-Baden and Baden-Durlach. The former of these, which produced one of the most famous generals of the 17th century, became extinct by the death of Augustus George in 1771, and its possessions were united with Baden-Durlach under Charles Frederick. By the treaty of Lunéville in 1801, Baden acquired a considerable addition of territory; in 1803 the margrave received the title of Elector; and by the treaty of Presburg in 1805 his domains were still further increased by the accession of Breisgau. On the dissolution of the empire in 1806, the elector

joined the Confederation of the Rhine, and received the title of Grand Duke, with 1950 square miles of additional territory. Shortly after this extension and consolidation had taken place, Bavaria laid claim to a portion of the duchy, but her demands were indignantly rejected, and in 1818 the grand duke bestowed on the country a political constitution, the fundamental principle of which was the territorial integrity of Baden. In the following year this integrity was guaranteed by the Frankfort Commission. The first session of the Baden parliament fell into disputes and had to be dissolved; but the second, in 1820, commenced the work of reform by the complete abolition of serfdom and the establishment of ministerial responsibility. In 1821 the union of the two Protestant churches in Baden was brought about. Other questions of importance, such as trial by jury, freedom of the press, abolition of tithes, and extension of education, became subjects of interest and debate; but, unfortunately, the influence of the French revolution of 1830 led the democratic party to excesses, which the Government met with acts of ill-advised repression. Matters were beginning to readjust themselves when the revolution of 1848 again aroused the opposing

forces. In 1849 the duke was constrained to flee, and Brentano, the democratic leader, took possession of Karlsruhe in the name of the national committee. By the 25th of June, however, the Prussian forces, after several severe engagements with the revolutionists, effected the restoration of the duke, who returned to his capital on 18th August; and it was not long before the country began to recover from the effects of the outbreak. Not, indeed, that it became quiescent; for Baden has had its full share in the political and ecclesiastical disputes that have been so rife throughout Germany during recent years. The Roman Catholic clergy, with the bishop of Freiburg at their head, have maintained an obstinate struggle with the Liberal party, which is now predominant. The separation of church and state has been established; the Jews have been admitted to full civic rights; freedom of trade has been promulgated, and a number of minor reforms successfully carried through. In the German war of 1866 Baden sided against Prussia; but in 1870 it joined in the formation of the new German empire, and its troops are incorporated in the 14th corps of the imperial army.



Ground-Plan of Baden-Baden.

BADEN (OR **BADEN-BADEN**, to distinguish it from other places of the name), a town and celebrated watering-place of Germany, in the grand duchy of Baden. It stands on the side of a hill, near the Oos or Oel, in a beautiful valley of the Black Forest, 18 miles S.W. of Karlsruhe; and it is connected by a branch with the Mannheim and Basel railway. The superiority of its situation, its extensive pleasure-grounds, gardens, and promenades, and the brilliancy of the life that is led during the season, have for a long series of years continued to attract crowds of visitors from all parts of the world. The resident population amounts to about 10,000, but that number is frequently augmented fourfold. The prevailing nationality is, or rather was, the French, but

Americans, Russians, and English are all numerous represented. The hot springs, which were among the earliest attractions of the place, are twenty-nine in number, and vary in temperature from 37° to 54° R., i.e., from 115° to 153° Fahr. They flow from the castle rock at the rate of 90 gallons per minute, and the water is conveyed through the town in pipes to supply the different baths. The town proper is on the right bank of the Oos, but the principal resorts of the adventitious population are on the other side. A *Conversationshaus* and a *Trinkhalle* or pump-room (1842), a theatre (1861), and a picture-gallery, are among the chief fashionable buildings, to which may be added the library and reading-room. The gaming-tables, which for so many

years were a striking feature of Baden-Baden, are now abolished. The only building of much antiquarian interest, with the exception of the castles, is the parish church, which dates from the 15th century, and contains the tombs of several of the margraves. There is a Protestant church a short distance to the east of Leopoldplatz, and not far off a small Episcopalian church; while on the Michaelsberg is the Greek chapel, with its gilded dome, which was erected over the tomb of the Roumanian prince, Michael Stroudza, who died at Baden in 1863.

The springs of Baden were known to the Romans, and the foundation of the town is referred to the Emperor Hadrian by an inscription of somewhat doubtful authenticity. The name of *Aurelia Aquensis* was given to it in honour of Aurelius Severus, in whose reign it would seem to have been well known. Fragments of its ancient sculptures are still to be seen, and in 1847 remains of Roman vapour baths, well preserved, were discovered just below the New Castle. From the 14th century down to the close of the 17th, Baden was the residence of the margraves, to whom it gave its name. They first dwelt in the Old Castle, the ruins of which still occupy the summit of a hill above the town, but in 1479 they removed to the New Castle (still so called), which is situated on the hill-side nearer to the town, and is remarkable for its subterranean dungeons. During the Thirty Years' War Baden suffered severely from the various combatants, but especially from the French, who pillaged it in 1643, and laid it in ashes in 1688. The margravine Sibylla rebuilt the New Castle in 1697, but the margrave Louis removed to Rastadt in 1706. Since the beginning of the present century the Government has greatly fostered the growth of the town.

BADEN, Switzerland, a small town in the canton of Aargau, on the Limmat, 14 miles N.W. of Zurich. It is much frequented on account of its warm medicinal springs, which are about 20 in number, and vary in temperature from 98° to 126° Fahr. About 15,000 persons visit the place annually. Tacitus, in the first book of his *Histories* (c. 67), incidentally speaks of it as *in modum municipii extractus locus, ameno salubrium aquarum usu frequens*; and numerous remains of pillars and inscriptions, coins, and other antiquities confirm his description. It was destroyed by the Alemanni and the Huns, but was again frequented during the reign of Charlemagne, though its modern prosperity only dates from the 15th century. For a long time the countship of Baden was in the hands of the Hapsburgs, but it was conquered by the Swiss Confederates in 1415. It was here that the famous disputation of Eck with Zwingle and Ecclampadius took place in 1526; and here was held the conference of 1589. In 1714 the peace which put an end to the war of the Spanish Succession was concluded at Baden between Austria and France; and four years afterwards a treaty between Zurich, Berne, and St Gall received its name from the town. Resident population, 3412.

BADEN, the chief town of a circle in Lower Austria, about 12 miles S. of Vienna on the railway to Gratz. It is beautifully situated at the mouth of the romantic *Heleenthal*, near the banks of the Schwachat, a rapid stream with several waterfalls, and has become a favourite summer resort with the inhabitants of the neighbouring capital. The warm baths, which give name to the town, are thirteen in number, and vary in temperature from 72° to 97° Fahr. They rise, for the most part, at the foot of the *Calvarienberg*, which is composed of dolomitic limestone. The number of patients is about 8000 annually. The celebrity of Baden dates back to the days of the Romans, who knew it by the name of *Aqua Cetia*; and remains of their occupation still exist. In 1812 the town suffered severely from a fire, but it has since been elegantly rebuilt. The principal buildings are the church of St Stephen, the theatre, the casino, and the

military hospital. A short distance to the west of the town stands the castle of Weilberg, which belongs to members of the imperial family. The only manufacture of much importance that is carried on in Baden is the production of steel-wares; these, especially the razors, are of excellent quality. Permanent population, about 6500.

BADGER (*Meles*), a family of Plantigrade Carnivora, possessing greatly elongated bodies and short limbs, each of the latter furnished with five toes, provided at their extremities with long, powerful claws, by means of which they form deep burrows in the earth. The carnassial tooth, which in the bears is wholly tuberculate, is in the badgers provided also with a cutting edge, their whole dentition being specially adapted to the partly vegetable, partly animal diet on which they subsist. The badger differs from all other mammals in having the lower jaw so articulated to the upper, by means of a transverse condyle firmly locked into a long cavity of the cranium, that dislocation of the jaw is all but impossible, and this enables those creatures to maintain their hold with the utmost tenacity. The European badger (*Meles Taxus*) may be taken as typical of the entire family. It is nowhere abundant, but is found over the entire northern parts of Europe and Asia. It is a quiet, inoffensive animal, nocturnal and solitary in its habits, sleeping by day in its burrow, and issuing forth at night to feed on roots, beech-mast, fruits, the eggs of birds, some of the smaller quadrupeds, frogs, and insects. It is said also to dig up the nests of wasps in order to eat the larvæ, as the ratel—a closely allied South African form—is said to rob the bees of their honey. The male and female are seldom seen together, and are supposed to trace each other by means of the odour of the secretion contained in a glandular pouch beneath the tail. Although the badger does not seek to attack, yet, when driven to bay, its great muscular power and tough hide renders it a formidable antagonist, as was often seen in the days, now happily gone by, when badger-baiting was a favourite amusement of the English peasantry. Fossil remains of the badger have been found in this country, apparently contemporaneous with the extinct cave bear, hyena, and tiger; still more ancient remains are said to have been found in the Red Crag of Suffolk, and should these prove authentic, the European badger, says Professor Owen, "will be the oldest known species of mammal now living on the face of the earth." The American badger (*Meles Labradorica*) is a native of California and Texas, and in its habits closely resembles the former species; it seems, however, to be more carnivorous. According to Gray, several species inhabit the southern parts of Asia. When badgers were more abundant than they now are, their skins dressed, with the hair attached, were commonly used for pistol furniture. They are now chiefly valued for the hair, that of the European badger being used in the manufacture of the best shaving-brushes, while the softer hair of the American species is employed for the same purpose, and also for painters' pencils. 5197 skins of the American badger were imported into London during 1873.

BADIA Y LEBLICH, DOMINGO, a celebrated Spanish traveller, better known under his assumed name of Ali Bey, was born in Biscay in the year 1766. After receiving a liberal education he devoted particular attention to the Arabic language, and made special preparation otherwise for his Oriental travels. Under the name of Ali Bey and in Mussulman costume, he visited Egypt, Morocco, Tripoli, Arabia, and Syria, and was received as a person of high rank wherever he appeared. On his return to Europe in 1807 he declared himself a Bonapartist, and was made Intendant, first of Segovia, and afterwards of Cordova. When the French were driven from Spain, Badia was compelled to take refuge in France, and there, in 1814, published an