

centuries, and extend under the firth to the distance of a mile. The smelting of the iron-ore is carried on in two or three blast-furnaces in the neighbourhood of Kinniel House, which was for many years the residence of Dugald Stewart. A part of Graham's Dyke, the Roman wall of Antoninus, runs through the parish. Population in 1871, 4256.

BORY DE SAINT-VINCENT, JEAN BAPTISTE GEORGE-MARIE, a learned and industrious French naturalist, was born at Agen in 1780. While a mere boy he displayed the scientific bent of his genius and attracted attention by two memoirs addressed to the Society of Natural History at Bordeaux. Having been sent as naturalist of Baudin's expedition to Australia in 1798, he left the vessel at the Mauritius, and spent two years in exploring Bourbon and the other islands of East Africa. Joining the army on his return, he was present at the battles of Ulm and Austerlitz, and in 1808 went to Spain with Marshal Soult. His attachment to the Napoleonic dynasty and dislike to the Bourbons were shown in various ways during 1815, and his name was consequently placed on the list of the proscribed; but after wandering in disguise from one city to another he was allowed quietly to return to Paris in 1820. In 1829 he was placed at the head of a scientific expedition to the Morea, and in 1839 he had charge of the exploration of Algeria. Through all the vicissitudes of his life his literary activity was great, and he did a great deal for the popularization of his favourite science. He was editor of the *Dictionnaire classique d'histoire naturelle*, and one of the principal authors of the *Annales des sciences physiques*; the official work on the Morea was produced under his care, and he contributed frequently to periodical publications. The most important of his separate productions are—*Essais sur les îles Fortunées*, 1803; *Voyage dans les îles d'Afrique*, 1804; *Justification de la conduite et des opinions politiques de J. B. Bory de Saint-Vincent*, 1816; *Voyage Souterrain*, being an account of the quarries in the neighbourhood of Maestricht, 1823; *L'Homme, essai zoologique sur le genre humain*, 1827; *Résumé de la géographie de la Péninsule*, 1838.

BOSA, a city on the western coast of the island of Sardinia, in the province of Cagliari and district of Oristano, in a fine valley on the northern bank of the Terno, in 40° 16' 40" N. lat. and 8° 25' 31" E. long. It is the see of a bishop, and has a cathedral and a diocesan seminary. The harbour is safe, being sheltered by an islet. Coral fishery is carried on, and there is trade in cheese, grain, and wine. Population, 6706.

BOSC, LOUIS AUGUSTINE GUILLAUME, French naturalist, was born at Paris on the 29th January 1759. He was educated at the college of Dijon, and attended the lectures of Durande on botany, which inspired him with a passion for natural history. He followed up his studies at Paris, and was a constant auditor at the Jardin des Plantes. Even when, closely occupied in official work, he managed to find time for his favourite researches and contributed many valuable papers to various scientific transactions and reviews. At the age of eighteen he had obtained an appointment under Government, and he rose to be one of the chief officials in the postal department. Under the ministry of Roland he also held the post of superintendent of prisons, but the violent outbreaks of 1793 drove him from office, and compelled him to take refuge in flight! For some months he lay concealed in the forest of Montmorency, barely subsisting on roots and vegetables. He was enabled to return to Paris on the fall of Robespierre, and soon after set out for America, resolving to explore the natural riches of that country. The immense materials he gathered were never published in a complete form, but much went to enrich the works of Lacépède, Latreille, and others. After his return, on the establishment of the

Directory, he was reinstated in his old office. Of this he was again deprived by the *coup d'état* of 1799, and for a time he was in great destitution. He set resolutely to work, however, and by his copious contributions to scientific literature, contrived to support himself and to lay the foundations of a solid reputation. He was engaged on the Supplement to Rozier's Dictionary, on the new *Dictionnaire d'histoire naturelle*, and on the *Encyclopédie Méthodique*. He edited the *Dictionnaire raisonné et universel d'agriculture*, and was one of the editors of the *Annales de l'Agriculture Française*. His increasing fame brought him manifold employments. He was made inspector of the gardens at Versailles, and of the public nurseries belonging to ministry of the Interior. The last years of his life were devoted to an elaborate work on the vine, for which he had amassed an immense quantity of materials. His death, on the 10th July 1828, prevented the prosecution of this work; and his notes which still exist are said to be so unsystematic as to be unfit for publication.

BOSCAN, JUAN, a Spanish poet, celebrated as the introducer of Italian measures into Spanish literature, was born about the close of the 15th century. The exact date is unknown, but it was probably a few years before 1500. He was of patrician birth and appears to have passed some years in military service. He died in 1540 at Perpignan, where he was residing with the duke of Alva. His poems were published in 1543 at Barcelona by his widow. They are divided into four books which mark out distinctly the stages of Boscan's poetical history. The first book contains light poems in the Old Castilian metres, resembling the *Cancioneros*. These were written in his youth, before 1526, in which year he became acquainted with Andrea Navagiero, ambassador from Venice. Navagiero urged him to adopt some of the Italian measures, and his advice gave a new turn to Boscan's activity. The second and third books contain a number of pieces in Italian metres, sonnets, canzones, and poems in blank verse, *terza rima*, and octaves. The longest of these poems is the *Hero and Leander*, in blank verse. The fourth book contains his best effort, the *Allegory*, written in the maturity of his powers, and exhibiting great delicacy of imagination and skillful verse composition. He also published, in 1534, a translation of Balthasar Castiglione's Italian poem *The Courtier*. Boscan's greatest follower in the endeavour to mould Spanish poetry after Italian models was Garcilassa de la Vega, who is more celebrated than his master.

See Bouterwek, *Spanish Literature*, vol. i.; Ticknor, *History of Spanish Literature*, vol. i.

BOSCAWEN, EDWARD, British admiral, was born August 19, 1711. He was the third son of Hugh, Lord Viscount Falmouth. He early entered the navy, and in 1740 distinguished himself at the taking of Porto Bello. At the siege of Carthage, in March 1741, at the head of a party of seamen, he took a battery of fifteen 24-pounders, while exposed to the fire of another fort. On his return to England in the following year he married, and entered parliament as member for Truro. In 1744 he captured the "Medea," a French man-of-war, commanded by M. de Hocquart, the first ship taken in the war. In May 1747 he signalized himself in the engagement off Cape Finisterre, and was wounded in the shoulder with a musket-ball. Hocquart again became his prisoner and the French ships, ten in number, were taken. On the 15th July, he was made rear-admiral and commander-in-chief of the expedition to the East Indies. On the 29th July 1748 he arrived off Fort St David's, and soon after laid siege to Pondicherry; but the sickness of his men and the approach of the monsoons led to the raising of the siege. Soon afterwards he received news of the peace, and Madras was delivered up to him by the French. In April 1750

he arrived in England, and was the next year made one of the lords of the Admiralty, and chosen an elder brother of the Trinity House. In February 1755 he was appointed vice-admiral, and in April he intercepted the French squadron bound to North America, and took the "Alcide" and "Lys" of sixty-four guns each. Hocquart became his prisoner for the third time, and Boscawen returned to Spithead with his prizes and 1500 prisoners. For this exploit he received the thanks of Parliament. In 1758 he was appointed admiral of the blue and commander-in-chief of the expedition to Cape Breton, when, in conjunction with General Amherst, he took the fortress of Louisbourg, and the island of Cape Breton,—services for which he again received the thanks of the House of Commons. In 1759, being appointed to command in the Mediterranean, he pursued the French fleet, and after a sharp engagement in Lagos Bay, took three large ships and burnt two, returning to Spithead with his prizes and 2000 prisoners. In December 1760 he was appointed general of the marines, with a salary of £3000 per annum, and was also sworn a member of the privy council. He died at his seat near Guildford, January 10, 1761, in the 50th year of his age.

BOSCOVICH, ROGER JOSEPH, a distinguished Italian mathematician and natural philosopher, and one of the earliest of foreign savants to adopt the theory of Newton, was born at Ragusa in Dalmatia, May 18, 1711, according to the usual account, but ten years earlier according to Lalande (*Éloge*, 1792). In his fifteenth year, after passing through the usual elementary studies, he entered the society of Jesus. On completing his novitiate, which was spent at Rome, he studied mathematics and physics at the Collegium Romanum; and so brilliant was his progress in these sciences that in 1740 he obtained the appointment of professor of mathematics in the college. For this post he was especially fitted by his large acquaintance with modern advances in science and by his skill in a classical severity of demonstration, acquired by a thorough study of the works of the Greek geometers. Several years before this appointment he had made himself a name by an elegant solution of the problem to find the sun's equator and determine the period of his rotation by observation of the spots on his surface. Notwithstanding the arduous duties of his professorship he found time for investigation in all the fields of physical science; and he published a very large number of dissertations, some of them of considerable length, on a wide variety of subjects. Among these subjects were the transit of Mercury, the Aurora Borealis, the figure of the earth, the observation of the fixed stars, the inequalities in terrestrial gravitation, the application of mathematics to the theory of the telescope, the limits of certainty in astronomical observations, the solid of greatest attraction, the cycloid, the logistic curve lines, the theory of comets, the tides, the law of continuity, the double refraction micrometer, various problems of spherical trigonometry, &c. In 1742 he was consulted, with other men of science, by the pope, Benedict XIV, as to the best means of securing the stability of the dome of St Peter's, in which a crack had been discovered. His suggestion was adopted. Shortly after he engaged to take part in the Portuguese expedition for the survey of Brazil and the measurement of a degree of the meridian; but he yielded to the urgent request of the pope that he would remain in Italy and undertake a similar task there. Accordingly, in conjunction with Christopher Maire, an English Jesuit, he measured an arc of two degrees between Rome and Rimini. The operations were begun towards the close of 1750, and were completed in about two years. An account of them was published in 1755, entitled *De Litteraria expeditione per pontificam ditionem ad dime-*

tiendos duos meridiani gradus a P. P. Maire et Boscovich. The value of this work was increased by a carefully prepared map of the States of the Church. A French translation appeared in 1770. A dispute having arisen between the Grand Duke of Tuscany and the republic of Lucca with respect to the drainage of a lake, Boscovich was sent, in 1757, as agent of Lucca to Vienna, and succeeded in bringing about a satisfactory arrangement of the matter. In the following year he published at Vienna his famous work on the molecular theory of matter, entitled *Theoria philosophice naturalis redacta ad unicam legem virium in natura existentium*. Another occasion for the exercise of his diplomatic ability soon after presented itself. A suspicion having arisen on the part of the British Government that ships of war had been fitted out in the port of Ragusa for the service of France, and that the neutrality of Ragusa had thus been violated, Boscovich was selected to undertake an embassy to London (1760), to vindicate the character of his native place and satisfy the Government. This mission he discharged successfully, with credit to himself and satisfaction to his countrymen. During his stay in England he was elected a fellow of the Royal Society, which received him with marks of the highest respect. He soon after paid this society the compliment of dedicating to it his Latin poem, entitled, *De Solis et Lunæ Defectibus*. This prolix composition, one of a class which at that time was much in vogue—metrical epitomes of the facts of science—contains in about five thousand lines, illustrated by voluminous notes, a compendium of astronomy. It was for the most part written on horseback, during the author's rides in the country while engaged in his meridian measurements. The book is characterized by Delambre as "uninstructive to an astronomer and unintelligible to any one else."

On leaving England Boscovich travelled in Turkey, but ill health compelled him soon to return to Italy. In 1764 he was called to the chair of mathematics at the University of Pavia, and this post he held, together with the directorship of the observatory of Brera, for six years. He was invited by the Royal Society of London to undertake an expedition to California to observe the transit of Venus in 1769; but this was prevented by the recent decree of the Spanish Government for the expulsion of the Jesuits from its dominions. The vanity, egotism, and petulance of Boscovich provoked his rivals and made him many enemies, so that in hope of peace he was driven to frequent change of residence. About 1770 he removed to Milan, where he continued to teach and to hold the directorship of the observatory of Brera; but being deprived of his post by the intrigues of his associates he was about to retire to his native place, when the news reached him (1773) of the suppression of his order in Italy. Uncertainty as to his future lot led him to accept an invitation from the king of France to Paris, where he was naturalized and was appointed director of optics for the marine, an office instituted for him, with a pension of 8000 livres. He remained there ten years, but his position became irksome, and at length intolerable. He continued however to devote himself diligently to the pursuits of science, and published many remarkable memoirs. Among them were an elegant solution of the problem to determine the orbit of a comet from three observations, and memoirs on the micrometer and achromatic telescopes. In 1783 he returned to Italy, and spent two years at Bassano, where he occupied himself with the publication of his *Opera pertinentia ad opticam et astronomiam, &c.*, which appeared in 1785 in five volumes quarto. After a visit of some months to the convent of Vallombrosa, he went to Milan and resumed his literary labours. But his health was failing, his reputation was on the wane, his works did not sell, and he gradually sank a prey to illness and disappointment. He fell into

melancholy, imbecility, and at last madness, with lucid intervals, and died at Milan on the 13th of February 1787. In addition to the works already mentioned Boscovich published *Elementa universæ matheseos* (1754), the substance of the course of study prepared for his pupils; and a narrative of his travels, entitled *Giornale di un viaggio da Constantinopoli in Polonia*, of which several editions and a French translation appeared. His latest labour was the editing of the Latin poems of his friend Benedict Stay on the philosophy of Descartes, with scientific annotations and supplements. (W. L. R. C.)

BOSNA SERAI, SERAIEVO, or in Italian **SERAGLIO**, a city of European Turkey, and capital of the province of Bosnia, is situated on the Migliazza near its junction with the Bosna, 246 miles south of Buda in 43° 54' N. lat. and 18° 24' E. long. It occupies the declivities of several small hills, and its numerous turrets give it a rather imposing aspect. It is defended by a strong citadel, and retains portions of its ancient walls. The houses are in general rather meagre, but of late there has been an improvement in the style of architecture, owing to the employment of Austrian and Italian workmen. The old Government buildings have been replaced by a handsome and spacious structure. There are upwards of 100 mosques, several Greek churches, and a few Roman Catholic convents. Educational establishments owe any merit they possess to foreign influence, and notably to the stimulus given by Miss Irby and Miss Mackenzie (afterwards Lady Sebright). Bosna Serai is one of the chief industrial and commercial cities in European Turkey. It manufactures tin, iron, and copper wares, fire-arms, cotton and woollen cloths, and leather, and is the centre of the Bosnian trade. In the neighbourhood are iron mines, and works of considerable extent. The city is the centre of a telegraphic system of some importance, and is well situated for railway communication with both north and south. Bosna Serai, originally called Bosnavar, was founded in 1263 by the Hungarian general Cotroman, and derives its present name from the *Serai* or palace built by Mahomet II. The population is very variously stated; the Prussian consul gives it as about 50,000 in 1865, and in 1867 as not more than 35,000, while Salaheddin Bey, in *La Turquie à l'exposition universale de 1867*, states it as high as 70,000.

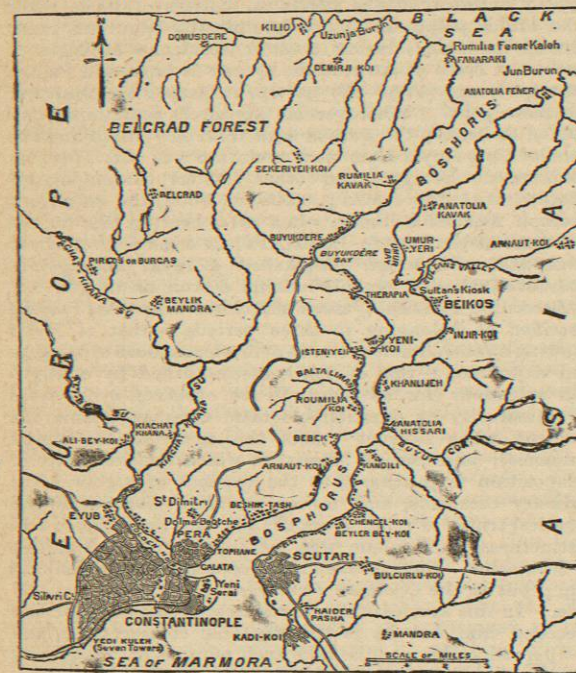
BOSNIA, the most north-westerly province of Turkey in Europe, comprising Bosnia Proper, a part of Turkish-Croatia, or Craina, the district of Herzegovina, and the ancient Rascia. It extends from 42° 31' to 45° 15' N. lat., and from 15° 40' to 21° 2' E. long; is bounded on the N. and W. by the Austrian dominions, S. by Montenegro and Albania, and E. by Servia; and has an area of about 24,024 square miles. The whole province, with the exception of the valley of the Save, is more or less mountainous, many of the summits reaching the height of 6000 feet. A large proportion of the surface is valuable forest-land, which furnishes almost inexhaustible stores of timber and fuel. Plums are largely grown in the northern portion and exported as prunes.—Beska on the Save being one of the chief centres of the trade. In Herzegovina the vine, olive, fig, and pomegranate flourish. Maize and wheat are the principal grains in cultivation, but barley, oats, hemp, and even rice are also grown. Abundance of pasture land occurs throughout the province, and cattle, sheep, and goats are reared; the number of the cattle was, however, greatly diminished by the plague in the decade ending with 1870. Large droves of swine are fed in the oak-forests. In mineral deposits the country is especially rich. The whole valley of the Bosnia is said to be one enormous coal-bed; copper is worked in several places, and at Inatch is a very valuable cinnabar mine. There are also some quarries of good marble, and at Tuzla is a copious spring of salt water,

from which culinary salt is manufactured, though the demand for this article has still to be met by a foreign supply. The manufactures of the province are on a small scale; they include leather, cloth, and iron wares. The principal exports are fruit, timber, cattle, wool, raw lamb-skins, furs of wild animals, wax, and honey. The foreign trade is almost solely confined to the Austrian dominions,—the lack of a port on the Adriatic greatly impeding the intercourse by sea. Within the last ten years there have been constructed several carriage roads, the most important of which are from the capital to Brood, Gradishka, Mostar, and Yenibazar respectively. A railway has been constructed from Rasnice in Austria to Banyaluka, forming part of a great connecting line between Constantinople and Western Europe. The province is divided into the seven sandjaks of Banyaluka, Binae, Herzegovina, Yenibazar, Serai, Travnik, and Zvornik. Ethnologically it is Servian, not even the aristocracy being Turks, though they are principally Mahometans. A small part of the south has an Albanian population. Mahometanism is not only predominant, but is sometimes enforced by persecution. Education is said to be greatly neglected, though from the native statistics a different judgment might be formed, no fewer than 1079 schools being registered; but of these a large proportion are attached to the mosques, and have a merely nominal existence. The total revenue of the province was, in 1871, 50,589,970 piastres (£456,715), and the expenditure, 19,724,745 (£178,070). The population increases very slowly, chiefly owing to mortality among the children occasioned by improper treatment. The climate is by no means unhealthy. The number of the inhabitants has remained almost stationary, being estimated at 1,100,000 in 1844, and at 1,279,296 in 1873. The largest cities after Bosna Serai, the capital, are Banyaluka (15,000), Fotcha, Mostar, Zvornik, and Travnik (about 12,000 each), and Yenibazar (from 9000 to 15,000). Bosnia was at first dependent on the Servian and Croatian kings, but was raised for a time to a separate principality, which reverted about 1339 to the Servian king Stephen. After his death it was again independent, and continued to have its own rulers till the latter half of the 15th century, in spite of the encroachments of the Turks, who at last succeeded in incorporating it in 1503. The Hungarians long disputed this appropriation, but the country was definitely ceded to Turkey at the peace of Carlovitz in 1699, which was confirmed by the treaty of Sistova in 1791. It is at present (1875) the scene of a formidable insurrection.

See Chamette Desfosse's *Voy. en Bosnie*, 1822; Pertusier, *La Bosnie*, 1822; Hilferding, *Bosnia, Herzegovina, i staraya Serbia* (in Russian) 1859; Sax, *Skizzen über die Bewohner Bosniens*, 1864; Roskiewicz, *Bosnia und Herzegovina*, 1867; Blau in *Zeitschrift für Erdk.*, Berlin, 1868; Rousseau in *Bulletin de la Soc. de Glog.*, 1868; Maurer, *Reise d. Bosnien*, 1870; Geiger and Leuret, *Studien über Bosnien*, etc., 1873; and a very full report by the English consul Holmes for 1872.

BOSPHORUS (or, more correctly, **BOSPORUS**, from the Greek Βόσπορος, Ox-ford), originally used for a strait, was especially applied to the *Bosporus Cimmerius*, or Strait of Yenikale, and the *Bosporus Thracius*, or Strait of Constantinople. In modern times it has almost become the exclusive designation of the latter strait, which unites the Black Sea with the Sea of Marmora and forms the boundary between Europe and Asia. The channel is about 16 English miles in length, and has a maximum breadth of nearly 2 miles, a minimum breadth of 550 yards, and along the middle a varying depth of 148 to 388 feet. In the centre there is a rapid current from the Black Sea to the Sea of Marmora, and a counter-current sets in along each shore. At the narrows the three currents produce a most violent commotion. The average temperature of the water hardly differs from that of the air, but it almost never

reaches the atmospheric maxima and minima. The surface is very rarely frozen over, not more than five or six instances being recorded since the 8th century A.D. The Golden Horn was partially frozen over in 1849 and 1862. The shores of the Bosphorus are composed in the northern portion of different volcanic rocks, such as dolerite, granite, and trachyte; but along the remaining course of the channel the prevailing formations are Devonian, consisting of sandstones, marls, quartzose conglomerates, and calcareous deposits of various kinds. The scenery on both sides is of the most varied and beautiful description.



Sketch-Map of the Bosphorus.

See Miss Pardoe's *The Bosphorus and the Danube*, 1839; Hammer, *Constantinopoli und der Bosporos*, 1822; Reiserwitz, *Bosporos und Attika*, 1861; Tehihatchef, *La Bosphore et Constantinople*, 1864, and *Asie Mineure* (Géographie physique comparée), 1852; Dethier, *Der Bosphor und Constantinopel*, 1873.

BOSSI, GIUSEPPE, an Italian painter and writer on art, was born at the village of Busto Arsizio in the Milanese, in 1776 or 1777. He was educated at the college of Monza; and his early fondness for drawing was fostered by the director of the college, who supplied him with prints after the works of Agostino Carracci for copies. Passing next to the academy of Brera at Milan, he there pursued his special artistic studies, and about 1795 went to Rome. Here he studied for five or six years, associating with many artists of the Italian school, and especially forming an intimate friendship with Canova. On his return to Milan he was named assistant secretary of the Academy of Fine Arts, and on the death of Bianconi succeeded him in the office of secretary. He rendered important service in the organization of this new institution. In 1804, in conjunction with Oriani, he drew up the rules of the three academies of art of Bologna, Venice, and Milan, and soon after was rewarded with the decoration of the Iron Crown. On the occasion of the visit of Napoleon I. to Milan in 1805, Bossi exhibited a drawing of the Last Judgment of Michael Angelo, and pictures representing Arora and

Night, Oedipus and Creon, and the Italian Parnassus. By command of Prince Eugene, viceroy of Italy, Bossi undertook to make a copy of the Last Supper of Leonardo, then almost obliterated, for the purpose of getting it rendered in mosaic. The drawing was made from the remains of the original with the aid of copies and the best prints. The mosaic was executed by Raffaelli, and was placed in the Imperial Gallery of Vienna. Bossi made another copy in oil, which was placed in the museum of Brera. This museum owed to him a fine collection of casts of great works of sculpture acquired at Paris, Rome, and Florence. Bossi devoted a large part of his life to the study of the works of Leonardo; and his last work was a series of drawings in monochrome representing incidents in the life of that great master. He left unfinished a large cartoon in black chalk of the Dead Christ in the bosom of Mary, with John and the Magdalene. In 1810 he published a special work in large quarto, entitled *Del Cenacolo di Leonardo da Vinci*, which had the merit of greatly interesting Goethe. His other works are *Delle Opinioni di Leonardo intorno alla simmetria de' corpi umani* (1811), and *Del Tipo dell' arte della pittura* (1816). Bossi died at Milan, December 15 1816. A monument by Canova was erected to his memory in the Ambrosian library, and a bust was placed in the Brera.

BOSSI, GIUSEPPE CARLO AURELIO, BARON DE, an Italian poet and diplomatist, was born at Turin, November 15, 1758. He made his first appearance as poet at the age of eighteen by the publication of two tragedies, *Rea Silvia* and *I Circassi*; and four years later he took the degree of doctor of laws. In 1781, in consequence of his ode in praise of the edict of toleration promulgated by the Emperor Joseph II., he was banished the kingdom; but having rendered during his exile an important service to his countrymen he was recalled and appointed under-secretary of state for foreign affairs. In 1792, on occasion of the French invasion, he was sent to the court of Prussia to negotiate an alliance, and thence went as ambassador to St Petersburg. Dismissed by the emperor in consequence of the treaty of alliance between Sardinia and France (1797), he was named ambassador to Venice, which he reached only in time to witness the fall of the republic. He was next appointed envoy to General Bonaparte in Italy. After the conquest of Sardinia Bossi was a member of the Provisional Government, and one of the three deputies sent to Paris to petition for annexation to France. The Russian invasion of 1799 drove him to take refuge in the Vaudois valleys. He was afterwards a member of the Provisional Government, but retired in 1802. Three years later he was made prefect of the Ain, he was created baron by Napoleon I. in 1810, and was afterwards transferred to the prefecture of La Manche. Deprived on the second return of the Bourbons, he came to England, but returned to France the following year. He spent his remaining years in retirement. Besides the works above mentioned Bossi was author of a long poem entitled *Oromasia*, on the events of the French revolution; *Monaca*, a poem on the secularization of convents (1787); and various lyrical pieces, among which are *Indipendenza Americana* (1785), *Olanda Pacificata* (1788), *Vision* (1799), &c. He died at Paris, January 20, 1823.

BOSSU, RENÉ LE, an eminent French critic, born at Paris, March 16, 1631. He studied at Nanterre, and in 1649 entered among the regular canons of Sainte-Geneviève. After having acted as professor in different religious houses for twelve years, he withdrew into retirement. His first publication was *Parallèle des Principes de la Physique d'Aristote et de celle de René Descartes*, which appeared in 1674, but met with little success. His next work, entitled *Traité du Poème Epique*, was published in

1675 and often reprinted afterwards. Its leading doctrine is that the subject should be chosen before the characters, and that the action should be arranged without reference to the personages who are to figure in the scene. Boileau, in his *Third Reflexion on Longinus*, pronounced this work "l'un des meilleurs livres de poétique qui, du consentement de tous les habiles gens, aient été faits en nôtre langue." It may be mentioned, however, that Bossu is said to have defended Boileau against Saint-Sorlin, and to have received his thanks for that service; and a sense of obligation may perhaps have dictated the commendation which Boileau bestowed on the work. Bossu died March 14, 1680.

BOSSUET, JACQUES BÉNIGNE, the celebrated orator and prelate, was born at Dijon, within a short distance of the cathedral, on the 27th September 1627. He was the fifth son of Bénigne Bossuet and Madeleine Mochette. The family of which he came, though of bourgeois rank, had long taken an honourable part in the public and official life of Burgundy. He was destined from infancy for the church, and grew up amid influences eminently favourable to the unfolding of his powers, for, although at six years of age, on his father's appointment to be president in the parliament of Metz, he was left at Dijon, yet his education had been wisely confided to an uncle, Claude Bossuet, a large-hearted man, ardently devoted to literature, whose delight it was to foster his nephew's intellectual gifts. These soon gave token of exceptional brilliancy, and in the Jesuits' College, where he went to school, he distanced all competitors in the facility with which he mastered the Greek and Latin classics, Virgil and Homer being his especial favourites, for whose writings he contracted an unalterable attachment, just as Horace became the life-long companion of his rival Fénelon. It was from a higher source, however, that Bossuet's genius, which was essentially of the Hebrew type, caught its finest inspiration; and one day reading a Bible left open by accident at the prophecies of Isaiah, he was so thrilled by their poetry that thenceforth he became virtually "a man of one book," and in Holy Scripture, read and re-read until learned ultimately almost by heart, he found the field in which his mind could best expatiate and gather light and power. In Bossuet, says Lamartine, the Bible was transfused into a man. With that keen-sighted appreciation of talent which they uniformly display, the Jesuits sought to enlist him in their order, but family influence being against the proposal, in 1642 he was sent to Paris; nor could the circumstances of his arrival there fail profoundly to impress the fervid imagination of the boy, for it chanced to be on the very day on which Richelieu, then near his end, was borne into the city in a splendid movable chamber, at the close of the vengeance-taking campaign, which terminated in the execution of De Thou. Bossuet entered the college of Navarre, the oldest in the University, where, under Nicholas Cornet, the presiding genius of the place, and in midst of the intellectual quickening imparted to it in common with the whole of learned Europe by the new philosophy of Descartes, he achieved distinction in every department except mathematics, for which he seems to have possessed neither the taste nor the faculty. At sixteen his attainments were the talk of the town. He became the pet of the lettered aristocracy of Paris, and it argues his strength of character that he was unspoiled by their caresses. The applause which greeted the delivery of his thesis for the bachelor's degree encouraged him to perfect his superb oratorical gifts, nor did he count it unlawful then to be a frequent spectator when the *chefs-d'œuvres* of Corneille were played, although, later, he was not sparing in his criticism of the stage. At twenty-four he was appointed archdeacon of Metz. In Lent 1652, after a season of retreat at St Lazare, he received priest's orders, and immediately quitted the gay

capital, and the career already opening to him there, to fulfil the duties awaiting him in the comparative obscurity of the provinces. Six years were spent in unwearied pastoral activity, as well as in exhaustive private study of Scripture and of the Fathers, notably St Augustine, although even in the less read Patristic writings he was at home, and quickly put his knowledge to use in a work of controversy entitled *Refutation du Catechisme de Paul Ferry*, a Protestant minister of Metz. It is of interest principally because it outlines even at that early date the doctrine afterwards vigorously defended by Bossuet of the limited authority of the popes in matters of faith. The echo of his pulpit eloquence had already begun to reach beyond Lorraine; during a short residence at Metz it fascinated Anne of Austria, the Queen Mother, and for the next ten years (1659-69) he was in perpetual request in the metropolis. Wherever he appeared court and city flocked to listen; the queens went from the palace and the nuns of Port Royal from their seclusion; Condé, Turenne, Madame de Sevigné, and other famous contemporaries mingled with the crowd; while, in 1662, the preacher's triumph reached a climax, when after hearing him for the first time at the Louvre, Louis XIV., in a moment of rarely awakened enthusiasm, despatched a royal message to Bossuet's father—"pour le féliciter d'avoir un tel fils."

According to Lachet, these matchless discourses may be classified as belonging to three periods:—that of Metz, showing a considerable measure of crudeness both of thought and expression; that of Paris, distinguished by strength and splendour (for, as Sainte-Beuve observes, every trace of immaturity or questionable taste disappears from the moment when Bossuet enters the circle of the king's influence); and that of Meaux, in which faultless grace of composition is purchased at the expense of vigour. On ordinary occasions, and for an audience that loved the practical truths of religion marshalled with logical force and distinctness, Bourdaloue was, perhaps, equally attractive as a preacher—there is even more contemporary talk about him; but in the *Oraisons Funèbres* Bossuet is unapproachable. In this species of oratory Mascaron and Flechier had preceded him, but he is the veritable creator of it, and nowhere does his genius take such wing as at the grave's mouth, when, recounting the virtues of the illustrious dead, he pictures, with wonderful sweep, of imagination and mastery of detail, the historical events and personages of the epoch in which they lived, the more impressively to demonstrate that all earthly pomp and renown "are shadows, not substantial things." Not that he altogether escapes the vice of the French pulpit of that age, for occasionally he does elevate into types of excellence those who fell far short of it; but, as compared with other offenders, the adulation which he offers is, even in the hearing of royalty, measured and temperate. His funeral orations at the death of Henrietta of England, of her daughter, the duchess of Orleans, and of the great Condé, are commonly deemed his finest efforts of the kind.

In 1669 Bossuet was appointed to the diocese of Condom, and in the year following he became preceptor to the Dauphin; but being unable, in conscience, to retain both offices he resigned the former, and, in consideration of the pecuniary sacrifice involved, obtained the revenues of the Abbey of St Lucien at Beauvais. Convinced that on the culture of the Dauphin might depend the future welfare of the French people, he threw himself with incredible energy into the novel duties of the preceptorship, and resumed his own education the better to educate his august but indolent pupil. He lacked that sweetness of nature, however, which afterwards gave to Fénelon such sway over the Dauphin's son. For the edification of his royal charge Bossuet wrote several able works, such as

L'Histoire abrégée de la France; La Politique sacrée; Traité de la connaissance de Dieu et de soi-même; and most celebrated of all, *Le Discours sur l'histoire universelle*. This work, originally meant to be a mere abridgment for use in the royal schoolroom, grew as he wrote into a magnificent historical narrative. It consists of three parts:—(1), a sketch of history from Genesis to the birth of the modern world under Charlemagne; (2), an account of the Mosaic and Christian economies; (3), a series of reflections on the vicissitudes of human government,—the whole being characterized by splendour of colouring and vast range of plan, although this latter feature is less striking in late editions than in the earliest, which was not broken up into chapters. In the composition of it Leibnitz greatly helped him, by forwarding from Germany every book bearing on the subject on which he could lay hands. Its central thought is that of all changes in history being overruled with sole reference to the progress and universality of true religion; but Bossuet's treatment of this theme, notwithstanding a host of striking and unchallengeable observations, is vitiated by his identification of the Christian faith exclusively with the Papal form of it, and by the way in which he ignores the place and value of pagan antiquity in the world's development, so as to invite, if not to justify, the sneer of Voltaire: "Il paraît avoir écrit uniquement pour insinuer que tout a été fait dans le monde pour la nation juive."

It was not until the close of 1679 that Bossuet's official duties as preceptor came to an end, but in the interval his industry otherwise did not slacken. He was elected a member of the Academy of France in 1671. About this time, too, he gave to the world the most frequently revised, most bitterly attacked, and most widely translated of all his books, *L'Exposition de la doctrine catholique*. Composed in 1669, and originally circulated in manuscript, it had been credited with effecting in this shape not a few conversions, among others that of Turenne. But Jean Daillé and other Reformers having charged it with toning down the harshness of Roman dogma with the purpose of ensnaring their flocks, Bossuet resolved to publish it. The book created a wide-spread flutter of excitement, as may be inferred from the terms employed in speaking of it by Jurieu, perhaps the ablest of Bossuet's opponents,—"Everybody is gone mad over the *Exposition*; everywhere one hears of the most disgraceful perversions." It twice received the *imprimatur* of the Pope in despite of the author's undisguised opinions with respect to infallibility. Curiously enough, it was this treatise that brought about in 1678 the conference between Bossuet and Claude, the learned pastor of Charenton. Floquet informs us that wherever he could obtain a face to face encounter, Bossuet preferred it to controversial writing. On the present occasion the discussion lasted five hours, turning on the authority of the church, with what result is, perhaps, not unfairly described by Bayle in the pithy remark—"That as at the battle of Seneff, both sides claimed the victory."

During the latter years of the preceptorship Bossuet, with a few genial associates, busied himself with *Notes and Annotations of the Books of Scripture*. Many pleasant hours were spent in these round-table studies, and it is proof of his inexhaustible energy that he did not hesitate, even so late in life, to acquire a knowledge of Hebrew, though there may be a touch of exaggeration in what was said of him by an admirer,—"that he was not less familiar with the language of Moses than with that of Homer." His life at court was not without its shadows. His very position involved him unwillingly in the miserable transactions springing out of the unhallowed relation in which the king stood to his successive favourites. But Bossuet never forgot the bishop in the courtier. He remonstrated

often and seriously with the profligate Louis. As spiritual adviser of the beautiful but unhappy La Vallière, his Christian gentleness and wisdom shine out conspicuously in the interviews and correspondence which issued in her retirement to the convent of the Carmelites. If, in the case of Madame de Montespan, his actions are more open to misconstruction, yet further investigation tends towards his acquittal of the charges advanced by various historians.

Appointed in 1681 to the bishopric of Meaux, Bossuet had scarcely been installed when he was summoned to take part in the memorable assembly of the French clergy with which his name will always be associated. This council was convoked by royal edict, at the instance of the clergy themselves, for the purpose of finding a way out of the conflict, yearly growing fiercer, between Louis and Rome. The strife arose about the *regalia*, or claim of the Crown to administer the affairs of a vacant see until such time as its new occupant should take the oath of fidelity. But in the course of its discussions the council was agitated by questions far wider than that in which it took its rise, and embracing eventually the whole subject of the extent and limits of Papal authority. Bossuet preached the opening sermon. He gave fearless utterance to his cherished opinions. Referring to the aggressive disposition of the Papacy he declared—"Ocean itself, immense though it is, has its limits, and to break through at its own caprice would be to lay desolate the world." At the same time, seeing the heated state of the public mind, he counselled moderation, occupying a middle place between Ultramontanists and ultra-Gallicans, and was even opposed to any formal declaration of the Gallican position. Being overruled in this chiefly through the influence of Harlay, archbishop of Paris, he next directed his efforts towards issuing the assembly's decision in the most temperate and conciliatory form. He was himself appointed to draw it up, and there resulted the famous four articles which were in substance these:—I. The civil authority is not subject to the ecclesiastical in temporal things; II. As decreed by the Council of Constance, a general council is superior to the Pope; III. The exercise of the apostolic power ought to be tempered by the usage of particular churches; IV. Except with the consent of the church the judgment of the Pope is not unalterable in matters of faith. Being virulently attacked, these propositions were defended by Bossuet in his great *Defense de la doctrine du clergé de France*, which, however, was not printed until 1735.

Bossuet applauded the shameful revocation of the Edict of Nantes (1685), but his English biographer reminds us that, stern as was his character, he did his utmost to secure to Protestants as much liberty as was possible under the existing law; and, further, that no military execution took place during his episcopate at Meaux.

In 1688 there appeared *L'Histoire des Variations des Eglises Protestantes*, a review and analysis, in fifteen books, of the confessions of faith emitted by Protestant churches during the epoch of the Reformation, in which Bossuet aims at demonstrating their incoherency and self-contradiction, even on cardinal points, as contrasted with the doctrinal stability of Rome. forcible and learned as it undoubtedly is, this work is grievously lacking in candour, and in the paramount love of truth, the treatment of Luther and his writings being especially unscrupulous and vindictive. Indeed, from first to last, it is executed in the spirit less of an upright judge than of an unprincipled partisan. These less attractive features of Bossuet's character, over which one would gladly throw the veil, became still more prominent when in 1689 there broke out the bitter quarrel on the subject of "Quietism," the melancholy and fluctuating history of which may be best embraced