

which consists in passing them through a kind of comb, which retains those that are too stout to go between the teeth. By repeating this with finer combs the bristles can be assorted to any number of sizes required. Various other substances are now used in place of bristles, and this was greatly stimulated by the scarcity of these during the Russian war. In 1808 whalebone fibres were patented in England for the purpose, and in 1810 twigs of broom, mallow, rushes, and other shrubs and plants. In 1842 the shafts of quills prepared and split up, and in 1872 horn and similar substances were used in the same way. The latter are softened by steeping them in an infusion of sage leaves or plants of that class, then flattened, rolled out, and extended and moulded so as to disintegrate them into threads. In 1844 a brush was patented made of stiff fibre and bristles, hard in one part and soft in another, so that the softer parts should follow the harder, and take up what the latter left. The same inventor also made tooth-brushes on the same principle. The hairs of the squirrel, horse, badger, bear, and other animals are also used for brushes, and those from the ears of cows and from the ichneumon, amongst others, for artists' pencils. When necessary the bristles are bleached by sulphur or other chemical agents. In the United States a kind of sorghum or broom-corn is extensively cultivated for the manufacture of brooms, and especially by the Shakers of New York State. The seed of the crop alone, it is stated, often pays the expense of cultivation, being, when mixed with other corn, good food for cattle and horses.

One of the most important purposes to which brushes have been applied is that of sweeping chimneys. So far back as 1789 John Elin patented an arrangement of brushes with this purpose in view. He was followed at intervals by others, and the use of these machines having been found practicable, the Acts 3 and 4 Vict. c. 85, and 27 and 28 Vict. c. 37, put an end to the cruelties previously practised, prohibiting the employment of children in sweeping chimneys.

Revolving brushes for cleaning rooms were patented in 1811, and others have followed. In 1825 they were constructed to take the place of teazles for raising the wool or pile of woollen and other cloths, and they are now used for polishing and other purposes in various manufactures. The first patent in which they were applied to hair-dressing appears in 1862. The patented invention for sweeping and cleaning roads by means of revolving brushes and other contrivances are very numerous. The first appears in 1699. It is that of Edmund Henning for "a new engine for sweeping the streets of London, or any city or town." No specification was enrolled, but the invention included the loading and removal of the refuse "with great ease and quickness." A long interval elapsed before anything further was done in this direction, the next patent being that of W. Ranyard, on 1st November 1825, which consisted of a number of brushes mounted upon two rims or placed upon an axis, which was raised on a vehicle or barrow. Boase and Smith's followed in 1828, including scraping, sweeping, and watering. From 1836 a succession of inventors follow each other rapidly, amongst whom frequently appears "Joseph Whitworth." Some of the most recent patents are Greenwood's, 17th February 1873; Robinson's, 4th April 1874; Sinclair and Clayton's, 20th February 1875; Kitson's, 21st April 1875. Many of these inventions include the removal of the refuse, as well as scraping. Some propose watering in addition; but the simplest and most easily managed is that most commonly used, which scrapes or sweeps the mud and rubbish to the sides of the road. A particular point in Mr Kitson's invention seems to be to clear out the dust and mud from between the joints of the paving stones

An improvement in brushmaking was patented in 1830 by Timothy Mason, which consisted in cutting grooves in the stocks or bases of brushes instead of boring holes, the grooves increasing in width from the outer surface. The hairs or bristles are tied up into tufts or knots, dipped in cement, placed in the grooves, and wedged tightly by the use of a blunt tool, which operation causes the tufts to expand and hold firmly in the enlarged recess. Various contrivances have been patented by which brushes might be self-supplied with water, soap, paste, paint, and the like, when in use, by means of receptacles or pipes being attached to them for the purpose.

One of the greatest advances in the brushmaking of the present day is the Woodbury machine, an American invention for bunching, wiring, and inserting bristles in the stock. In this machine a metal comb of uniform thickness is filled with bristles, holding them by the middle, so that one-half of the bristles appear above the surface of the comb, the other underneath. The comb thus charged moves in guideways, and discharges the bristles from each division successively into a channel in which, by an ingenious contrivance, they are brought gradually into a horizontal position and a proper quantity taken up to form a tuft, which is moved along an incline. At the bottom of this is a hollow cylinder that does not enter, but is placed firmly against the tuft hole in the brush stock. A plunger now acts upon the bristles. The end of the plunger is slotted crossways; one slot receives the bristles, the other a piece of wire. The plunger is made to descend and double the bristles into a loop at the middle. Other mechanism unwinds the binding wire from a reel, straightens the wire, and passes the proper quantity through the enlarged upper portion of the slot, and at the same time cuts off the length required. The plunger now descends further, receiving a rotatory motion on its vertical axis, winds the wire by forcing it into the thread of a nut at the lower portion of the cylinder, and fastens it round the double end of the bunch. The end of the wire now acts as a tap, cutting a female screw in the end of the block, whilst the upper end of the wire thread, by expanding, acts as a pawl, and prevents the unscrewing of the tuft. This machine is described in the *Scientific American*, 1872, p. 31, with illustrations.

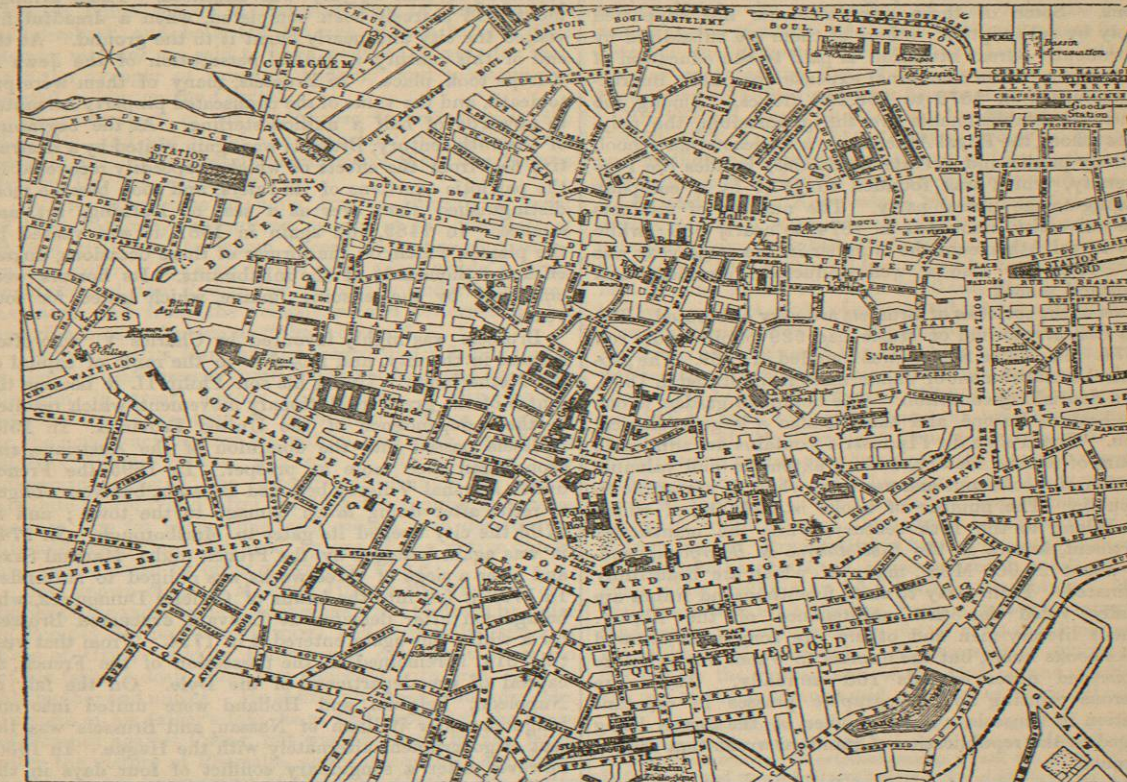
For further information on the subject of brushes, the reader will find the abridgement of specifications relating to brushing and sweeping, published at the Patent Office, a most useful manual. (J. J. L.)

BRUSSELS (French, *Bruxelles*; Flemish, *Brussel*; German, *Brüssel*), capital of Belgium and of the province of South Brabant, is situated on the small River Senne, about 50 miles from the sea, in 50° 51' N. lat., 4° 22' E. long. It lies in the midst of a beautiful and fertile country, and is picturesquely built on the top and sides of a hill, which slopes down to the Senne. The general contour of the old town of Brussels is pentagonal, and is well defined by the boulevards, which occupy the site of the old fortifications; but extensive additions have been made, especially to the east and south, and present a very irregular outline.

Brussels may be considered to consist of two parts, each presenting characteristics peculiar to itself. The New Town or upper part of the city is dry and healthy, and contains a very large number of handsome buildings, both public and private. The lower part is the more ancient and interesting of the two, but is damp, and in summer unhealthy, from the exhalations of the river and the numerous canals. In the former are situated nearly all the public offices, the royal palace, the chamber of deputies, the residence of the foreign representatives, and the principal hotels. The latter contains the Hôtel de Ville and

some of the best remains of the old Gothic architecture, and is the seat of nearly all the trade and commerce of the town. The facilities for commerce are very considerable. Though the Senne is not navigable itself, and is in fact now (1876) in process of being arched over to afford room for a new boulevard, it supplies water to some of the canals that intersect the lower portion of the city. By these canals Brussels communicates with the great Belgian cities, Mechlin, Ghent, Bruges, and Antwerp on the north, and Charleroi on the south. It further enjoys the advantage of railway communication with France and Germany, and the chief towns of the Belgian dominions. The streets are for the most part well paved, well lighted, and abundantly supplied with excellent water. There are

in the town innumerable fountains, some of which are handsomely ornamented with sculptures in stone and bronze. Of these the best are *Les Fontaines des Fleuves* in the Hôtel de Ville, *La Fontaine de Minerve* in one of the great squares, and the *Mannekin-pis* behind the Hôtel de Ville. Some of the streets are macadamized, but the majority of them are causewayed, while the *trottoirs* are either flagged or paved with flint-stones. In the new town some of the streets are remarkably handsome; they contain a considerable number of shops and cafés similar to those of Paris, and form the chief promenades of the inhabitants. In the old town they are for the most part narrow and sombre. There are fourteen squares in Brussels, many of which are used as market-places. Of these the



Plan of Brussels.

largest are the Place du Grand Sablon, the Place Royale, and the Grande Place before the Hôtel de Ville. In the last-named square, surrounded for the most part with houses that date from the time of the Spanish possession, the Counts Egmont and Horn were beheaded in 1568, by order of the duke of Alva, who surveyed the scene from the windows of the Brood-Huys (otherwise Maison du Roi), a remarkable specimen of Gothic architecture still extant. In the Place de la Monnaie are the mint, the exchange, and the great theatre. In the Place des Martyrs, the heroes who fell in the Revolution of 1830 are interred. In front of the palace is the Public Park, a fashionable summer promenade, which covers an area of about 14 acres. It is beautifully laid out with walks, adorned at moderate distances with groups of sculpture; and as it is planted with trees which shade it from the sun, the grass is

always fresh and green. In the lower town is the Allée Verte, an equally fashionable promenade, which runs parallel with the Mechlin canal, having a triple row of linden trees on each side, and leads towards the village of Lacken, where, since 1815, the king has had a suburban castle.

Of the public buildings of Brussels the most remarkable are the cathedral church of St Michel et Ste Gudule, the Hôtel de Ville, and the Palace of Justice, a modern erection. The cathedral was built in 1010, and in it was held the first chapter of the order of the Golden Fleece in 1535. It contains a remarkable pulpit, and some splendid specimens of stained glass. From its towers a fine view of the surrounding country may be obtained. The Hôtel de Ville, built in 1400, is profusely ornamented; it has a tower 360 feet in height. The other public buildings of Brussels are for the most part handsome, but are quite

uninteresting. The principal hospitals are those of St Peter and St John, which are both admirably managed, and contain together about 1000 beds. The patients are waited upon by the sisters of charity. As in all the large Belgian towns, there is, besides two other nunneries, a convent of Beguins, which formerly numbered 1000 nuns. The mass of the native population are Catholics; but as the English residents are very numerous, there are several Protestant churches. The Jews have a synagogue at Brussels, and hold their grand consistory there.

The number of charities in Brussels is very great; of these the most important are the Foundling Hospital, the Orphan Asylum, and the Société Philanthropique, whose object is to prevent mendicity. There are besides numerous alms-houses, which annually give relief to about 35,000 persons. Some of these establishments are supported entirely by subscription; others of them are subsidized by Government. Great attention is paid to the education of poor children. The communal expense for public instruction amounted in 1873 to 858,150 francs. Among the educational establishments are the gymnasium, the polytechnic school, the Royal Athenæum, a Lancasterian school, and many public and private academies, besides the Free University, which was founded in 1834 by a company belonging to the liberal party. The number of students at the university amounted in 1874 to nearly 580; while at the Royal Athenæum the number in the same year was 772. There is also a well-conducted veterinary and agricultural school.

Some of the societies of Brussels are very celebrated. The Royal Conservatorium of Music had 529 pupils on its roll in 1874. The Royal Society was founded in 1769. The geographical establishment of Vandermaelen, instituted in 1830, is in a flourishing condition. The botanical garden is one of the best in Europe, and there is also a large zoological garden. The Palais de l'Industrie contains an admirable museum of natural history, and an extensive and valuable collection of books and manuscripts, which is accessible to the public. The number of books is 234,000; of which 2000 belong to the 15th century, while the manuscript department, known as the *Bibliothèque de Bourgogne*, contains about 22,000 MSS., many of which are beautifully illuminated. From sixty to sixty-five thousand francs are annually voted for the maintenance of the library. Eminent literary men and others are sometimes allowed to take books home, but the number to whom this privilege is conceded never exceeds 100 annually. There are numerous printing and lithographic presses in constant operation in Brussels, a large number of the former being engaged in the republication of standard works that appear in France.

The principal manufactures of Brussels are those of lace and tulle, carpets, woollen, linen, and cotton fabrics, jewellery, and articles of vertu. The most remarkable of these is that of lace. The finer sorts of flax used in the manufacture cost from £12 to £16 sterling per lb. An English yard of this lace costs £8. The persons who spin the thread work in rooms almost completely darkened, and are thus compelled to concentrate their attention; and the thread spun in this way is said to be finer and more delicate than any that has hitherto been produced by other means. Excellent carriages are made in Brussels two-thirds cheaper than those of England, but inferior to them in quality.

In 1837, the population of Brussels was 104,265; in 1846, 123,874; in 1849, 138,189; in 1850, 142,289; and in 1873, 180,172. At the last date there were 365,404 in the nine contiguous communes. In 1846, the houses in the town numbered 13,563, and in 1866, 18,543.

The history of Brussels, though it does not date from so

remote a period as that of other Flemish cities, can still be clearly traced back to the 7th century. At that time St Gery, bishop of Cambrai, built a chapel on one of the small islands in the river, and by his eloquence and piety soon attracted a large congregation. The site being well adapted for building, a hamlet soon sprung up, and speedily became a town, which in the 11th century was walled in and fortified. Though in commercial importance Brussels did not at this time equal Ghent or Bruges, its traffic in cloth was very considerable, and its workers in iron and steel were not surpassed by any in Europe. In the 14th century the various trades were incorporated into guilds, who regulated the taxes and other financial matters of the city, and drew up a code of municipal laws, in which the principle of trial by jury was admitted. These arrangements had scarcely been completed, when a dreadful fire visited the city and nearly burnt it to the ground. At the end of this century a general persecution of the Jews in Europe took place. In Brussels, many of them were put to death, and the value of the confiscated property amounted to upwards of half a million sterling. At the beginning of the 15th century, Brussels was again visited by a destructive fire, from the effects of which it speedily recovered by the patriotic exertions of its rulers, and soon became more distinguished than ever as a seat of learning, art, and science. In 1489, and again in 1587, it was visited by the plague, which, on the former of these occasions, carried off many thousands of the inhabitants. Its horrors were enhanced by the ensuing famine, which lasted for four years.

Brussels was highly favoured by Charles V., who often resided in the city, and raised it to the rank of capital of the Netherlands. Under his son Philip II it became the centre of the great revolutionary movement, which resulted in the independence of the United Province. In 1598 Brussels passed into the dominion of the Austrians, and soon began once more to prosper. In 1695 the French under Marshal Villeroy besieged Brussels, but were obliged to retire after doing much damage to the town; and in 1706 the city opened its gates to Marlborough. In 1746 it was again besieged by the French under Marshal Saxe, and after a siege of three weeks was obliged to surrender. In 1792 it fell into the hands of General Dumouriez, who being soon after defeated at Louvain, evacuated Brussels for a while, but again entered it in 1794. From that year till 1814, it remained in the possession of the French, as capital of the department of the Dyle. On the fall of Napoleon, Belgium and Holland were united into one kingdom under William of Nassau, and Brussels was the seat of government alternately with the Hague. In 1830, however, after a sanguinary conflict of four days in the streets of the city, the Belgians declared their independence; and erecting their state into a separate kingdom, offered the crown to Leopold of Saxe-Coburg, whose long and peaceful reign (1831-1865) contributed greatly to the development of the resources of the country.

BRÜTON, a market-town of England, in the county of Somerset, pleasantly situated in the valley of the Brue, about 10 miles S.S.W of Frome by rail. It has a town-hall, a hexagonal market-cross, a grammar school, and some manufactures of hair-cloth, woollens, and hosiery. Population of hundred in 1871, 3701.

BRUTUS. The name of a distinguished plebeian family at Rome. The first who bore it was LUCIUS JUNIUS BRUTUS, one of the first two consuls, 509 B.C. According to the legends, his mother was the sister of Tarquinius "Superbus," the last of the Roman kings, and at his father's death, his elder brother had been put to death by the reigning family in order to get possession of his wealth. Junius, the younger, owed his safety to his reputed

dulness of intellect (whence his surname of Brutus), which character, however, he had assumed with a view both to his present security and future revenge. The opportunity came when Lucretia, wife of Collatinus, was outraged by Sextus Tarquinius; and he took a leading part, together with her husband and father, in expelling the family of the Tarquinius from Rome. He and Collatinus were therefore elected consuls,—or rather prætors, which was the original title. In a conspiracy formed afterwards for the restoration of the banished dynasty, the two sons of Brutus were found to be deeply implicated, and were executed by sentence of their father, and in his sight. The Etruscans of the cities of Veii and Tarquinii making an attempt to restore Tarquinius to the throne, a battle took place between them and the Romans, in which Junius Brutus engaged Aruns, son of the deposed king, in single combat on horseback, and both fell by each other's hands. The Roman matrons are said to have mourned a year for him, as "the avenger of woman's honour," and a statue was erected to him on the Capitol.

Many members of the family rose to eminence in the Republic, and are found, as plebeians, ranged on the popular side. The most distinguished of these was DECIUS JUNIUS BRUTUS, consul, 325 B.C.

In later times came MARCUS JUNIUS BRUTUS, a jurist of high authority, considered as one of the founders of Roman civil law, to whom Cicero dedicates his treatise called *Orator*. His son, of the same name, made a great reputation at the Roman bar, chiefly by undertaking prosecutions, and from the vehemence and bitterness of his speeches became known as "the Accuser."

DECIUS JUNIUS BRUTUS first served under Julius Cæsar in Gaul, and afterwards commanded his fleet, and was held by him in great honour and esteem. Nevertheless, whether from patriotism or from lower motives, he joined in the conspiracy against his patron, and, like his relative Marcus Junius Brutus, was one of his assassins. He afterwards resisted the attempt of Antony to obtain absolute power; and after heading the republican armies against him for some time with success, was deserted by his soldiers in Gaul, betrayed by one of the native chiefs, and put to death by order of Antony, 43 B.C.

Best known of all is MARCUS JUNIUS BRUTUS, son of a father of the same name (treacherously put to death by order of Pompey during the civil wars), and of Servilia, sister of Cato of Utica. Young Marcus was only eight years old at his father's death, and was educated with great care by his mother and uncles. He at first practised as an advocate. In spite of his father's fate, he at first supported the cause of Pompey against Cæsar, but was pardoned by the latter after the victory of Pharsalia, and subsequently appointed by him to the government of Cisalpine Gaul. His justice and moderation won him great honour from the provincials under his rule. Influenced probably by his friend Caius Cassius, he afterwards joined in the conspiracy against the great dictator, and was one of the foremost in his assassination. He maintained the cause of the republic by seizing and holding against Antony's forces the province of Macedonia, where he was joined by Cassius. But at Philippi they were defeated by Antony and Octavianus Cæsar, and rather than be taken prisoner, he fell on his sword, 42 B.C. He was an earnest student through all his active life, and is said to have been employed in his tent, on the night before the battle of Pharsalia, in making an abridgment of Pausanias.<sup>1</sup> He wrote several philosophical treatises and some poetry, but nothing has survived. He combined with these tastes the incongruous occupation

<sup>1</sup> "Is not the leaf turned down  
Where I left reading?"  
SHAKESP. *Jul. Cæsar* Act iv. sc. 3.

of a money-lender, Cicero and King Ariobarzanes being amongst his clients. His second wife was his cousin Portia, daughter of Cato.

BRUTUS, or BRUTE, is asserted in the fabulous history of Geoffrey of Monmouth to have been the grandson of Æneas, and to have destroyed the race of giants in Britain; to which he gave his name, founding there the city of New Troy, afterwards London.

BRUX, a city in the circle of Saatz, in the Austrian kingdom of Bohemia, on the River Bila. It consists of an old town, surrounded with walls, and three suburbs, and contains, besides the courts and public offices of the circle, nine churches, three monasteries, a gymnasium, barracks, a military college, and an educational establishment of Piarists. Its inhabitants are partly engaged in the coal-mines, and in the preparation of salts from the Seidlitz waters in the vicinity. A battle was fought here in 1421 between the Hussites and Saxons; and in 1646 the Swedes captured the fort of Landswert, now dismantled. Population in 1869 (including Taschenberg), 6102.

BRUYÈRE, JEAN DE LA. See LA BRUYÈRE.

BRYANT, JACOB (1715-1804), a writer on theological and mythological subjects, was born at Plymouth in 1715. His father had a place in the customs there, and was afterwards stationed in Kent, where his son was first sent to a provincial school, whence he was removed to Eton. Here he appears to have remained till 1736, the date of his election to King's College, Cambridge, where he took his degrees of bachelor and master of arts in 1740 and 1744. He returned to Eton in the capacity of private tutor to the duke of Marlborough, then marquis of Blandford; and the good taste which his pupil showed through life, in the protection of the fine arts, and in the pursuit of science, sufficiently demonstrated the beneficial influence of his instructor's example. In 1756 he went to the Continent as private secretary to the duke of Marlborough, then master-general of the ordnance and commander-in-chief of the forces in Germany; and he was rewarded after his return, for his various services to the family, by a lucrative appointment in the ordnance, which allowed him ample leisure to indulge his literary tastes. Bryant died in his eighty-ninth year, on the 14th November 1804, in consequence of a fall from his chair while reaching up for a book in his library. He left his library to King's College, having, however, previously made some valuable presents out of it to the king and to the duke of Marlborough. He bequeathed £2000 to the Society for the Propagation of the Gospel, and £1000 for the use of the superannuated collegers of Eton School.

His principal works are the *New System or Analysis of Ancient Mythology, wherein an attempt is made to divest tradition of fable, and to reduce truth to its original purity*, 3 vols. 4to, 1774-76, which is fantastic and now wholly valueless; *An Address to Dr Priestley on the Doctrine of Philosophical Necessity*, 8vo, 1780; *Vindicia Flavianæ; Observations on the Poems of Thomas Rowley, in which the authenticity of these poems is ascertained*, 2 vols. 12mo, 1781; *Treatise on the Authenticity of the Scriptures, and the Truth of the Christian Religion*, 1792; *Observations upon the Plagues inflicted upon the Egyptians*, 8vo, 1794; *Observations on a Treatise, entitled Description of the Plain of Troy, by Mr de Chevalier*, 4to, 1795; *A Dissertation concerning the War of Troy, and the expedition of the Greeks, as described by Homer, showing that no such expedition was ever undertaken, and that no such city in Phrygia existed*, 4to, 1796; *Observations on the Vindication of Homer, written by J.B.S. Morritt, Esq.*, 4to, 1799; *The Sentiments of Philo Judæus concerning the Word of God*, 8vo, 1797; *Dissertations on various Subjects in the Old Testament*.

BRYAXIS, a Greek sculptor, the contemporary of Scopas and Praxiteles, with whom he took part in the sculptures of the mausoleum at Halicarnassus, about 345 B.C. Of his other works the following are mentioned:—five colossal figures of gods at Rhodes, Bacchus (*Liber Pater*) at Cnidus, a group of Æsculapius and Hygeia at Megara, Apollo in the grove of Daphne at Antioch, a statue of Pasiphaë, and

a portrait of Seleucus (it is not said which). On doubtful authority he is also said to have been the sculptor of a group of Jupiter and Apollo with a lion at Patara, and of a statue of Serapis. Before his time there is no mention of statues of Æsculapius or Serapis, and it is supposed that the types which we now have of these deities were introduced by Bryaxis. The statue of Apollo at Daphne represented the god in his character of Musagetes, with long flowing drapery girt at the waist. The Bacchus at Cnidus must have been similarly draped; and altogether Bryaxis seems to have shown as much preference for draped and mature forms as Praxiteles displayed for nude and youthful figures.

**BRYDGES, SIR SAMUEL EGERTON (1762-1837)**, a miscellaneous writer, was born 30th November 1762. He studied at Queen's College, Cambridge, and adopted the profession of law. In 1790 he persuaded his elder brother that their family were the heirs to the barony of Chandos, being descended from a younger branch of the Brydges who first held the title. The case was tried and lost, but Brydges never gave up his claim, and used to sign himself *Per legem terræ* B. C. of S. (i.e. Baron Chandos of Sudeley). It has been said that he underwent the labour of re-editing Collins's *Peerage*, for the sole purpose of inserting a statement about his supposed right. In 1814 he was made a baronet, and in 1818 he left England. He died at Geneva in 1837. Sir Egerton was a most prolific author; he is said to have written 2000 sonnets in one year. His first volume of poems was published in 1785; of his other numerous works, including novels, political pamphlets, and bibliographies, perhaps the most important are *Censura Literaria*, 10 vols., 1805-9, and *Autobiography, Times, Opinions, and Contemporaries of Sir S. E. Brydges*, 1834.

**BRZEZANY**, a town of Austria, in Galicia, S.E. from Lembergo on the River Zlota-Lipa, in 49° 30' 25" N. lat. and 24° 41' 39" long. It possesses a Roman Catholic, a Greek, and an Armenian church, a castle, a convent, and a gymnasium; and it carries on a considerable manufacture of linen and leather. The population in 1869, including some contiguous villages, amounted to 9290.

**BUBASTIS**, the great name of the Egyptian goddess Bast, supposed to hold the same place in the Egyptian Pantheon as Artemis or Diana. The triad of Memphis consisted of three gods—Ptah or Vulcan, the Greek Hephaistos; Bast, the wife of Ptah and mother by him of Nefer-Atum, or "the good Tum;" and Sestet, formerly called Pasht, the sister or antithesis of Bast. This last goddess was also called *Merienptah*, or "the beloved of Ptah." Although the names of Bast, Sestet, and Merienptah are written with different hieroglyphs, their types are exactly alike, being that of a lion-headed goddess having on her head the sun's disk entwined by an uræus. Sestet and Bast appear both to have personified fire acted upon by Ptah, the cosmic demiurgos, and Vulcan. Owing to the pantheistic ideas prevalent in Egypt, Bast was identified at times with Neith, the Egyptian Athene or Minerva, and Athor, the Aphrodite or Venus. Her type and attributes were also those of Tefnu or Daphne, the pupil or daughter of the sun; and it was probably from her relation to this goddess, who, with her twin brother Su or Sôs, represented the Apollo and Artemis of the religious, and the Gemini, or Twins, of the zodiacal system, that Bast was identified with Diana. Bast was supposed to be the beneficent portion of the element fire and the bringer of good fortune; her sister and rival Sestet to represent the malevolent deity of the element and the bringer of ill-fortune. At a later period Bast has the head of a cat substituted for that of a lion, and holds in her hands a vase or situlus. About the time of the 26th dynasty, figures of her, made of porcelain, abound, representing the goddess seated and sometimes holding a

sistrum. Her local worship was principally carried on at Bubastis, the modern Tel Basta. The Speos Artemidos, or Sheik Hassan, Anxtata supposed to be Letopolis near Memphis. The cat was sacred to this goddess, and mummies of this animal are found at Bubastis, the Speos Artemidos, and Thebes, sometimes in bronze or wooden figures in shape of the cat seated on a pedestal, carved in form of the vase which was the hieroglyphic name of the goddess. Connected with Bubastis were the Bubasteia or festival of the goddess, celebrated with great pomp at the city of Bubastus, and the largest and most important in Egypt. The Egyptians flocked to it by water, accompanied by music; and as many as 700,000 are said to have been present on the occasion. A nome was also named after this goddess, and the capital city called Bubastus or Bubastis was on the site of the present Tel Basta on the Bubastite branch of the Nile. In later times the canal of Necho started from it to the Red Sea, and the adjoining lands were given by Psammetichus to the Greek mercenaries. It is, however, mentioned in inscriptions of the earlier periods of history, and was an important city. Taken by the Persians under Memnon, its walls were razed, and it sunk gradually in importance. The nome struck some bronze coins of small size in the eleventh year of the Emperor Hadrian, 127 A.D., with a goddess holding in her hands a small animal, possibly a cat. Many antiquities and remains are found in the ruins of the city.

Brugsch, *Geogr. Inschrift*, i. 138-236; Jablonski, *Panth. Egypt.*, iii. p. 68; Diodorus, i. 27; Herodot. ii. 67, 137-156; *Rev. Arch.* 1863, 195; Wilkinson, *Mann. and Cust.*, iv. 277, v. 203.

**BUCANEERS**, a band of piratical adventurers of different nationalities united in their opposition to Spain, who maintained themselves chiefly in the Caribbean Seas during the 17th century.

The island of St Domingo was one of several in the West Indies which had early in the 16th century been almost depopulated by the oppressive colonial policy of Spain. Along its coast there were several isolated establishments presided over by Spaniards, who were deprived of a free and convenient market for the produce of the soil by means of the monopolies imposed by the mother country. Accordingly English, Dutch, and French vessels were welcomed with eagerness, and their cargoes readily bought. The island, thinned of its former inhabitants, had become the home of immense herds of wild cattle, which multiplied with great rapidity; and it became the habit of the hardy smuggler to provision his ship at St Domingo. The natives still left upon the island were skilled in preserving flesh by means of fire and smoke at their little establishments called Boucans. The adventurers learned "boucanning" from the natives; and gradually Hispaniola became the scene of an extensive and illicit butcher trade. A sailor in those days when piracy abounded was expert with his weapons, and was almost a fighting man by trade. Spanish monopolies were the pest of every port from Mexico to Cape Horn; and the seamen who had sailed the Caribbean were filled with a natural hate of everything Spanish. The pleasures of a roving life gained upon them, while the monotony of its routine was broken by occasional skirmishes with the forces organized and led by Spanish officials. Out of such conditions arose the Buccaneer, alternately sailor and hunter, even occasionally a planter,—roving, bold, not over-scrupulous, not unfrequently savage, with an intense detestation of the power and the representatives of Spain.

In the year 1625 indirect assistance and encouragement previously given culminated in a combined venture on behalf of the Buccaneers by the Governments of England and France. Each nation contributed a band of colonists, and selected the island of St Christopher, in the West

Indies, where the settlers of both nations were simultaneously planted. The English and French were, however, not over-friendly; and in 1629, after the retirement of several of the former to an adjoining island, the remaining colonists were surprised and partly dispersed by the arrival of a Spanish fleet of thirty-nine sail. Many were carried off, and threats were freely used as to the future settlement of the island. But on the departure of the fleet the scattered bands returned, and encouragement was given to their countrymen in St Domingo. For buccaneering had now become a most profitable employment, operations were extended, and a storehouse secure from the attacks of the Spaniards was required. The small island of Tortuga lying to the N.W. of Hispaniola was seized for this purpose in 1630, converted into a magazine for the goods of the rivals, and made their headquarters, St Domingo itself still continuing their lucrative hunting ground.

Spain was not indifferent to this proceeding, though she could not prudently take immediate action. Eight years, however, had not gone, ere, watching her opportunity when many Buccaneers were absent in the larger island on their ordinary pursuit, she attacked Tortuga, and massacred every settler she could seize. But the hunters to the number of 300 returned; and the Buccaneers, now distinctly seen to be in open hostility to the Spanish arms, began to receive recruits from every European trading nation, and for three-quarters of a century became the acknowledged scourge of the Spanish American trade and dominions.

France, throughout all this, had not been idle in watching over her own interests. She had named the Governor of St Christopher "Governor-General for the French West India Islands," and in 1641 he took possession of Tortuga for the Crown of France, expelled all English from the island, and attempted the same with less success in St Domingo. England had at home something vastly more important to attend to, and the Buccaneers had to maintain themselves as best they could,—now mainly on the sea.

In 1654 the Spaniards regained Tortuga from the French, into whose hands it again, however, fell after a period of six years. But this state of matters was, as may be readily conceived, too insecure even for these rovers, and they would speedily have succumbed to the perils of their mode of life, had not a refuge been found for them by the fortunate conquest of Jamaica in 1655 by the navy of Cromwell, on behalf of the English Commonwealth. These conquests were not made without the aid of the Buccaneers themselves. The taking and retaking of Tortuga by the French was always with the assistance of the roving community; and at the conquest of Jamaica the English navy had the same influence in its favour. The Buccaneers, in fact, by this time constituted a mercenary navy, ready for employment against the power of Spain by any other nation, on condition of sharing the plunder to be obtained; and they were noted for their daring, their cruelty, and their extraordinary skill in seamanship.

Their history now conveniently divides itself into three distinct epochs. The first of these extends from the period of their rise to the capture of Panama by Morgan in 1671, during which time their characteristic peculiarity as robbers was that they were hampered neither by Government aid nor, till near its close, by Government restriction. The second, from 1671 to the time of their greatest union and power, 1685, when the scene of their operations was no longer merely the Caribbean, but principally the whole range of the Pacific, from California to Chili. The third and last period extends from that year onwards; it was a time of disunion and disintegration, when the inde-

pendence and rude honour of the previous periods had degenerated into unmitigated vice and brutality.

It is chiefly during the first period that those leaders flourished whose names and doings have been associated with all that was really influential in the exploits of the Buccaneers,—the most prominent being Mansvelt and Morgan. The commerce of Spain, which had been gradually dwindling since the wreck of the Invincible Armada and the death of Philip II., had by the middle of the 17th century become utterly insignificant. The Buccaneers were thus deprived of the plunder of the Spanish mercantile marine. But Spanish settlements remained; and in 1654 the first great expedition on land, attended by considerable difficulties, was completed by the capture and sack of New Segovia in Honduras, on the mainland of America. The Gulf of Venezuela, with its towns of Maracaibo and Gibraltar, were attacked and plundered under the command of a Frenchman named L'Ollonois, who performed, it is said, the office of executioner for the whole crew of a Spanish vessel manned with ninety seamen. Such successes removed the Buccaneers further and further from the pale of ordinary civilized society, fed their revenge, and inspired them with an avarice almost equal to that of the original settlers from Spain. Mansvelt, indeed, in 1664, popular among all the Buccaneers, conceived the idea of their permanently settling as a body of regular colonists upon a small island of the Bahamas, named Providence, and Henry Morgan, a Welshman, intrepid and unscrupulous, joined him in some preliminary cruises. But the untimely death of Mansvelt nipped in the bud the only rational scheme of permanent settlement which seems at any time to have animated the members of this wild community; and Morgan, now elected commander, swept the whole Caribbean, and from his headquarters in Jamaica led triumphant expeditions to Cuba and the mainland. He was leader of the expedition wherein Porto Bello, one of the chief and best fortified ports in the West Indies, was surprised, taken, and plundered.

But this was too much for even the adverse European powers; and in 1670 a treaty was concluded between England and Spain, proclaiming universal peace and friendship among the subjects of the two sovereigns in the New World, formally renouncing hostilities of every kind, withdrawing commissions granted to privateers, and agreeing to forget the past and for the future to punish all offenders. Great Britain was to hold all her possessions in the New World as her own property (a remarkable concession on the part of Spain), and consented, on behalf of her subjects, to forbear trading with any Spanish port without licence obtained. On the proclamation of the treaty in Jamaica, the Buccaneers rose to a man, ready for the most daring exploit which it had yet been in their power to achieve; they resolved to carry the terror of their name to the shores of the Pacific.

Accordingly, in 1671 Morgan embarked 2000 men on board a fleet of thirty-nine ships, sailed for a convenient port in the Caribbean, and crossed the Isthmus to lay siege to Panama. After a difficult journey, on foot and in canoes, they found themselves nearing the shores of the South Sea and in view of the turrets of the fated city. On the morning of the tenth day they commenced an engagement which, ere the close of the evening, ended in the rout of the defenders of the town. It was taken, and, accidentally or not, it was burnt. Neither sex nor condition was spared in the barbarities which ensued; and the conquerors returned laden with spoil. Morgan was not even true to his own men in the division of the booty; he returned to Jamaica, became respectable under Government, was after a little made deputy-governor of the island, and took advantage of his position to punish his