

violet clings to the soil, and above there is nothing but a little lichen. The number of wild flowering plants may be estimated at 900, upwards of 270 of which are peculiar to the Canaries. The forms of vegetation must in the main be considered North African, since the origin of many of those which they have in common with Southern Europe should be looked for in Africa. The character of the vegetation in Lanzarote and Fuerteventura islands, composed of extensive plains and low hills, with few springs, is different from that of the other islands, which are more elevated and have many springs. The wood is more abundant, and the vegetation more luxuriant.

*Geology.*—Recent soundings have proved that the Canary Islands, like the other island groups of the North Atlantic, are the summits of mountains that are surrounded by an ocean of great depth. The lower and exterior portion of these islands consists for the most part of basalt, compact, vesicular, or scoriaceous, interstratified with beds of variously-coloured tufa. The compact variety of basalt frequently contains scattered grains and crystals of augite and olivine. In some cases the rock is chiefly trachyte. In Grand Canary the fossils contained in the tufas prove that movements of elevation began in the Upper Miocene period. They continued down to the Pleistocene period, for raised beaches containing shells of the recent period exist both in Teneriffe and Grand Canary. Simultaneously with the upheaval subaerial eruptions were taking place. Many of the superimposed streams of lava are divided from one another by red bands of laterite, probably ancient soils formed by the decomposition of the surfaces of the lava, and showing that the building up of the islands was a slow process. In Teneriffe the basalt and tufa form an exterior mass, through which in the centre emerge the felspathic or trachytic rocks forming the nucleus of the volcanic cone, and over them fragments of pumice and streams of modern lava have been thrown. These trachytic rocks contain numerous disseminated crystals of glassy felspar. Obsidian is found in several parts of Teneriffe, and is usually spotted with white crystals of felspar. The few minerals that have been found in the Canary Islands are those characteristic of volcanic regions. A little iron exists, but is not turned to account. In no part of Teneriffe has there been discovered any sedimentary rock. The old lavas in Lanzarote are covered by a thin layer of white concretionary limestone, the origin of which is obscure. In Grand Canary and Fuerteventura there is also calcareous stone, but its nature does not appear to be known.

*TENERIFFE*, the largest island of the group, lies between Grand Canary and Gomera. It is of irregular shape, 60 miles in length, with an extreme breadth of 30 miles. Not more than one-seventh is cultivable. A chain of mountains traverses the island in the direction of its greatest length, and in the middle of the broadest part rises the celebrated Peak, locally known as the Pico de Teyde, which, with its supports and spurs, occupies nearly two-thirds of the whole island. It has a double top; the highest point, El Piton, is 12,200 feet above the sea; the other, Chahorra, connected with the first by a short narrow ridge, has a height of 9880 feet. They are both orifices in the same grand dome of trachyte. Neither reaches the line of perpetual snow. There is, however, a natural cavern, 11,050 feet above the sea, where snow is preserved all the year. Snow remains about four months on the upper part of the Peak.

For more than one-half of its circumference the base of the true peak rises from an elevated but comparatively level tract, called by the Spaniards *El Llano de la Retama* (*retama* being the name of the *Cytisus nubigenus* which abounds there), and by the English the Pumice-Stone Plains. On the south-east, south, and south-west there is a high curved ridge overlooking the Pumice-Stone Plains,

and presenting a very steep face to the Peak. This is the analogue of the Somma ridge of Vesuvius. Between the ridge and the sea the slope is more gradual, and there are intervening table-lands. A path used by the country people in going from one side of the island to the other crosses this ridge at the height of 8000 feet. Peaks rise from the ridge, one of which (*Guajara*) attains the height of 8900 feet. This ridge (the Llano) and the modern volcanic cone resemble in aspect a fortress with circular ramparts and a fosse. The ramparts are about 8 miles in diameter, and tower in some places more than 1500 feet above the fosse. They consist, as shown in the sections, of beds of trachyte, greenstone, and tufa of various thicknesses, and intersected by dykes and faults. On the north-west comparatively late eruptions have filled up the fosse. The modern cone, then, is a pile of lava, pumice, and ashes, thrown up in an ancient crater which had become greatly enlarged either by a falling in of the upper part of the cone, or by a series of violent explosions. Both El Piton and Chahorra have craters on their summits, from which issue steam and a little sulphureous vapour. The crater on El Piton is partly surrounded by a wall of lava, which has been made white by the action of sulphureous vapours, and every crevice contains small crystals of sulphur. The thermometer rises considerably when thrust into the ground. The crater is about 300 feet across, with a depth of 70 feet. The average slope of the lower part of the cone is 28°; that of the sugar loaf at the top is 33°. The crater on Chahorra has a diameter of 4000 feet; its depth is scarcely 150 feet. The view from the highest point, when no clouds intervene, is very extensive. All the islands of the Archipelago are visible, and the horizon is 140 miles distant. Neither the coast of Africa nor the island of Madeira is within the range of vision.

The ascent of the Peak is usually made from Orotava, on the northern side of the island. After the cultivated grounds are left, the region of arborescent heaths is crossed. This zone extends over the zones of laurels and pines which have here disappeared. Above this is a belt covered with *codoso* (*Adenocarpus frankenioides*), and this extends to the region of *retama*, the first bushes of which are met with at the pass which admits the traveler into the *Llano de la Retama*. The scenery here is in striking contrast with what it has previously been. Instead of a steep and rugged ascent among black basaltic rocks, the traveller enters upon gently sloping ground, covered to a considerable depth with white pumice gravel, amongst which spring bushes of *retama*. The tender shoots of this shrub serve the wild goats for food, and the flowers yield a rich honey to the bees. The entrance to the Llano at a sort of portal (called *Portillo*) between two basaltic hills, is about 7000 feet above the sea. Between two and three hours are consumed in crossing the Llano to the base of the cone, the lower part of which (*Monton de Trigo*) is ascended to a point 9750 feet above the sea, called *Estancia de los Ingleses*, where the mules are usually left, and where travellers frequently pass the night. Then comes the Malpays, 1000 feet in altitude, consisting of rough black lava streams broken up into blocks and stones. These cease at the neck called *Ramblata*, the lip of an older crater over which the lava poured before the sugar-loaf cone of pumice and ashes was thrown up. The pumice is in such quantity that at a distance it has the appearance of snow coating the Peak. From twenty to twenty-four hours are consumed in ascending the Peak and returning to Orotava.

To the north-west of the grand cone some thousands of feet below Chahorra, there are many small cones of eruption, showing that the intensity of volcanic action was greatest on this side. Eastward from the ridge bounding the Pumice-Stone Plains extends a chain of mountains to

the north-eastern extremity of the island. The highest peaks are Izana (7374 feet), Perejil (6027), and Cuchillo (5467).

We have no account in history or eruptions from either crater of the Peak. In 1795 a great quantity of lava was poured out from three vents on the eastern side; and in the same year lava streams issued from a crater near Guimar, half-way between Santa Cruz and the Peak. In the year 1706, a vent on the north-western side of the Peak discharged a copious stream, which flowed down to the sea, and nearly filled up the harbour of Garachico. For three months in 1798 much lava and other volcanic matter were ejected from orifices to the west of Chahorra.

*Santa Cruz de Santiago*, on the south coast, is the residence of the governor-general of the Canaries, the civil lieutenant-governor of the Teneriffe district, and the military governor of the island. Its position is 28° 28' 30" N. lat. and 16° 16' W. long. It is a well-built and tolerably clean town of 10,830 inhabitants, lying on a small plain bounded by bare and rugged volcanic rocks, amongst which lie narrow valleys called *barrancos*. Scarcely any vegetation, except thorny cactuses and euphorbias, is to be seen in the neighbourhood. The streets are at right angles to each other, narrow, but provided with side walks. There are three public squares. The houses are generally low, with flat roofs; those of the better class are large, with a court-yard in the middle, planted with shrubs in the Spanish fashion. The market is well supplied with meat, fruits, and vegetables. Good water is brought from the fine forest of Mercedes, which is composed of laurels and other indigenous trees. A British consul resides in the town, and several English families. The accommodation for strangers is neither plentiful nor good. The Spanish cloak is much worn by the men, and the white mantilla by the women. Dromedaries brought from Lanzarote and Fuerteventura are in use for the conveyance of merchandise and in agricultural operations. A good animal costs from 30 to 40 dollars. A few wheel-carriages are in use. Much ground in the neighbourhood is planted with cactus (*Opuntia Tuna*) for the support of the cochineal insect. The town is defended by several batteries; and it was by a shot from one of these that Lord Nelson lost his arm, when he unsuccessfully attacked the place in 1797. Some English flags lost on that occasion are still hanging in one of the churches. The anchorage is good, and a mole facilitates landing. About 200 vessels annually visit the port. The climate is dry and moderately warm, the annual mean being 71° Fahr. The mean of the coldest month is 63°·8 Fahr., and of the hottest 78°·8 Fahr. Rain falls on an average on thirty-six days in the year.

*Laguna* (population 4645) stands at the distance of four miles from Santa Cruz, in the centre of a plain where much grain is produced, elevated 1425 feet above the sea, and nearly surrounded by mountains. The situation is beautiful, but the town itself is gloomy. It contains several deserted convents and a cathedral. In summer the temperature is refreshingly cool, and for that reason Laguna is then resorted to by the rich of Santa Cruz. In winter it is cold and damp, the plain being frequently laid under water by rain. This is in consequence of three aerial currents meeting there, from the north, east, and south-west. The mean temperature of the year is 63°·2 Fahr. Snow has never been known to fall here. The humidity of the atmosphere is shown by the quantities of sempervivum growing on the houses and walls.

A good road connects Santa Cruz and Orotava, a town on the north coast 25 miles distant. It passes through Laguna and Matanza,—a place deriving its name from the overthrow of the invading Spaniards by the Guanches in 1494. All travellers speak in terms of warm admiration of the

scenery in this part of the island. Humboldt says he "never beheld a prospect more varied, more attractive, more harmonious in the distribution of the masses of verdure and of rocks, than the western coast of Teneriffe." Date palms form a striking feature in the landscapes. The town of *Orotava* (population 3228) is 1040 feet above the sea. The houses are solidly built, but it has a deserted aspect. A stream of water is conducted through every street. The famous dragon-tree, which so many travellers have described, was lately destroyed by a storm. *Port Orotava*, three miles from the town, is a clean place, with between 4000 and 5000 inhabitants, amongst whom are three or four English families. The streets are broad and the houses well built. The roadstead, protected by a fort and some batteries, affords little or no shelter against wind. The botanic garden, founded by a patriotic Spanish nobleman, is now in the hands of a market-gardener. At *Tcod de los Vinos*, a pretty town of 4000 inhabitants, farther to the west, in a fertile district, is a dragon-tree, the largest now existing in the island. The stem near the ground has a circumference of 38 feet, and its height is upwards of 60 feet. Near the town is an immense cavern, in which many Guanche bones are to be seen. There are several other towns of less importance, principally in the north-west, not far from the coast. The highest inhabited place is Chasna, on a plain more than 4000 feet above the sea, to the south of the Peak.

*GRAND CANARY* (*Gran Canaria*), the most fertile island of the group, is nearly circular in shape, with a diameter of 24 miles and a circumference of 75 miles. The interior is a mass of mountain, reaching to the height of about 6000 feet above the sea, with ravines radiating to the shore. Its highest peak, *Los Pexos*, is 6400 feet above the sea. Large tracts are covered with native pine (*P. canariensis*). There are several mineral springs on the island. From the nature of the ground only a small part is under cultivation. *Las Palmas* (population 12,572), the seat of the local Government, is a well-built and clean town on a small bay on the north coast, deriving its name from the numerous palm trees. It contains a handsome cathedral, a hospital, a college, several secularized convents, and an alameda or public walk. Its climate is more humid than that of Santa Cruz. Water is brought into the principal streets and squares by an aqueduct. The harbour, *Puerto de la Luz*, is defended by several forts, and affords good anchorage and shelter against all winds except the south-east. A British vice-consul resides here. In 1851 the cholera visited the island, and 9000 persons died, whilst not a single case occurred on any other island. *Telde*, the second place in the island, stands on a plain, surrounded by palm trees. At *Atalaya*, a short distance from Las Palmas, the making of earthenware vessels employ some hundreds of people, who inhabit holes made in the tufa.

*PALMA* (correctly, San Miguel de la Palma), 26 miles long, with an extreme breadth of 16 miles, lies 67 miles W.N.W. of Teneriffe. It is traversed in its longest direction (north to south) by a chain of mountains, the highest of which is 7900 feet above the sea. At the broadest part is a crater nine miles in diameter, known as the *Caldera* (i.e., cauldron), from which, on its south-west side, runs a ravine to the sea. The bottom of the crater has an elevation above the sea of 2300 feet, and it is overhung by peaks that rise more than 5000 feet above it. Some of these peaks are covered with snow for several months in the year. Extensive woods, principally composed of chestnut and pine, lie on their flanks. Palma contains several mineral springs, but there is great want of fresh water. The only stream which is never dried up is that which issues from the *Caldera*. In 1677 an eruption, preceded by an earthquake, took place from a volcano at the southern extremity of the island, and much damage

was done by the ejected ashes, stones, and lava. The sugar-cane is grown on an elevated plain called Los Llanos. *Santa Cruz* on the eastern coast is the principal town (population 4400). Ribands and stockings are manufactured there from silk produced on the island. The anchorage is good. The cultivated soil is fertile, but the labouring classes are in a wretched condition, notwithstanding their industrious habits.

LANZAROTE, the most easterly of the group, has a length of 31 miles and a breadth varying from 5 to 10 miles. It is naked and mountainous, bearing everywhere marks of its volcanic origin. *Montaña Blanca*, the highest point, attains a height of 2000 feet, and is cultivated to the summit. In 1730 the appearance of half the island was altered by a volcanic outburst. A violent earthquake preceded the catastrophe, by which nine villages were destroyed. In 1825 another volcanic eruption took place accompanied by earthquakes, and two hills were thrown up which still emit smoke. The port of Naos on the south-east of the island affords safe anchorage. It is protected by two forts. A short distance inland is the town of Arreife (population 2700), where a British vice-consul resides. The climate is hot and dry. There is only a single spring of fresh water on the island, and that is in a position difficult of access. From the total failure of water the inhabitants were once compelled to abandon the island. Grain, wine (which is of superior quality), brandy, barilla, orchil, and raisins made from the muscatel grape are the principal articles of export. Dromedaries are used as beasts of burden. *Teguise* (population 1000), on the north-west coast, is the residence of the local authorities. A strait of about 6 miles in width separates Lanzarote from Fuerteventura.

GRACIOSA, a small uninhabited island, is divided from the north-eastern extremity of Lanzarote by a channel a mile in width, which affords the most capacious and only safe harbour for large ships at the Canaries; but basaltic cliffs, 1500 feet high, prevent intercourse with the inhabited part of Lanzarote. A few persons reside on the little island *Alleganza*, a mass of lava and cinders ejected at various times from a now extinct volcano, the crater of which has still a well-defined edge.

FUERTEVENTURA lies between Lanzarote and Grand Canary. It has a length of 52 miles, and an average width of 12 miles. Though less mountainous than the other islands, its aspect is barren. The springs of fresh water are only two, and they are confined to one valley. Lava streams and other signs of volcanic action abound, but there has been no igneous activity since the Spaniards took possession. At each of its extremities are high mountains, which send off branches along the coast so as to enclose a large arid plain. The highest peak reaches 2500 feet. In external appearance, climate, and productions this island greatly resembles Lanzarote. An interval of three years without rain has been known. The wine is bad. Barilla and orchil are largely exported. *Oliva*, with 970 inhabitants, is the largest town. A smaller place in the centre of the island named *Betancuria* is the residence of the authorities. *Cabras*, on the eastern coast (population 1000), is the chief port. Dromedaries are bred here.

*Gomera* lies 20 miles south-west of Tenerife. Its greatest length is about 23 miles. The coast is precipitous and the interior mountainous, but it has the most wood and is the best watered of the group. The inhabitants are very poor. The palm trees produce excellent dates; and wine, brandy, orchil, raw silk, and dried fruits are sent to Tenerife. Dromedaries are bred on Gomera in large numbers. *St Sebastian*, the chief town and a port, has 2240 inhabitants. Columbus resided here before sailing in search of the New World.

HIERRO, or *Ferro*, the most westerly and the smallest island of the group, is somewhat crescent-shaped. Its length is about 18 miles, its greatest breadth about 15 miles, and its circumference probably 50 miles. It lies 92 miles W.S.W. of Tenerife. Its coast is bound by high steep rocks, which only admit of one harbour, but the interior is tolerably level. Its hill-tops in winter are sometimes wrapped in snow, which, however, does not lie long. Better and more abundant grass grows here than on any of the other islands. The island is exposed to westerly gales, which frequently commit great damage. Fountains of fresh water are few, but there is a sulphurous spring, with a temperature of 102° Fahr. The once celebrated and almost sacred *Til* tree, which was reputed to be always distilling water in great abundance from its leaves, no longer exists. Only a small part of the cultivable land is under tillage, the inhabitants being principally employed in pasturage. Wine, brandy, orchil, excellent dried figs, and sheep are sent to Tenerife. At *Valverde*, the principal town, with 4640 inhabitants, the local authorities reside. Geographers were formerly in the habit of measuring all longitudes from Ferro, the most westerly land known to them. The longitude assigned at first has, however, turned out to be erroneous; and the so-called "Longitude of Ferro" does not coincide with the actual longitude of the island.

See Bethencourt, *The Canarian*, published by the Hakluyt Society in 1872; Von Buch, *Description des Iles Canaries*, 1808; Bory de Saint-Vincent, *Les Iles Fortunées*, 1825; Fritsch, *Reisebilder von den Canarischen Inseln*, published as the 22d supplemental part to Petermann's *Mittheilungen*; C. Piazzi Smyth, *Teneriffe*, 1868. (J. Y. J.)

CANCALE, a seaport town of France, in the department of *Ille-et-Vilaine*, 10 miles E. of *St Malo*, on the bay of *St Michael*. A considerable trade is carried on in oysters, which are found in the bay in great numbers and of excellent quality. In 1758 the duke of Marlborough disembarked an army of 14,000 English here for the purpose of attacking *St Malo*, but retired without accomplishing anything. Population in 1872, 3814.

CANCAO, CANCAR, or KANG-KAO, otherwise known as *Ponthiamus* or *Potai-mat*, or in Chinese, *Ha Thian*, the capital of a small state in Western Cambodia, on the eastern side of the Gulf of Siam, at the mouth of the *River Cancao* or *Klong Chanda*; in 10° 14' N. lat. and 104° 55' E. long. The town was once a great centre of Cambodian trade, its port having been declared free by a man of Chinese origin, who took advantage of the civil troubles of Siam to effect his purpose. In 1717, however, the Siamese expelled the merchants who had flocked to the place; and though a considerable exportation of rice and salt is still maintained, the prosperity of the town has largely diminished. The harbour is shallow, though the river in general has a great depth of water. A canal gives communication with the *Mekong River*.

CANCER, or CARCINOMA (from *cancer*, or *καρκινος*, an eating ulcer), is the name given to a class of morbid growths or tumours which occur in man, and also in certain of the lower animals. The term is apt to be somewhat loosely employed, partly owing to the fact that there are not a few forms of diseased growth respecting which it is still a matter of debate whether they are to be regarded as cancerous or not; and in some measure also to the difficulty often experienced in recognizing true cancer particularly in its earlier stages.

The disease exists in various forms, which, although differing from each other in many points, have yet certain common characters to which they owe their special significance.

1. In structure such growths are composed of nucleated cells and free nuclei together with a milky fluid called

cancer juice, all contained within a more or less dense fibrous stroma or framework.

2. They have no well-defined limits, and they involve all textures in their vicinity, while they also tend to spread by the lymphatics and veins, and to cause similar growths in distant parts or organs called "secondary cancerous growths."

3. They are undergoing constant increase, and their progress is usually rapid.

4. Pain is a frequent symptom. When present it is generally of a severe and agonizing character, and together with the local effects of the disease and the resulting condition of ill health or "cachexia," hastens the fatal termination to which all cancerous growths tend.

5. When such growths are removed by the surgeon they are apt to return either at the same or at some other part.

The chief varieties of cancer are *Scirrhus* or hard cancer, *Encephaloid* or soft cancer, and *Epithelial cancer*.

*Scirrhus* is remarkable for its hardness, which is due to the large amount of its fibrous, and relatively small proportion of its cell elements. It is of comparatively slow growth, but it tends to spread and to ulcerate. Its most common seat by far is the female breast, though it sometimes affects internal organs.

*Encephaloid* is in structure the reverse of the last, its softness depending on the preponderance of its cell over its fibrous elements. Its appearance and consistence resemble brain substance (hence its name), and it is of such rapid growth as to have given rise to its being occasionally termed *acute cancer*. Its most frequent seats are internal organs or the limbs. Ulceration and hæmorrhage are common accompaniments of this form of cancer.

*Epithelial cancer* is largely composed of cells resembling the natural epithelium of the body. It occurs most frequently in those parts provided with epithelium, such as the skin and mucous membranes, or where those adjoin, as in the lips. This form of cancer does not spread so rapidly nor produce secondary growths in other organs to the same extent as the two other varieties, but it tends equally with them to involve the neighbouring lymphatic glands, and to recur after removal.

Various views are entertained, and much discussion has taken place respecting the causation of cancer, but little has as yet been satisfactorily ascertained on the point. By some the disease is held to be from the first an entirely local affection, due to some alteration in the nutrition of the part, irrespective of any condition of the system generally, but in course of time coming to assume a malignant form, and to infect the system secondarily. Others, on the contrary, maintain that a certain constitutional condition, either as regards the blood or some of the tissues of the body, must exist prior to the development of the disease to which it gives rise. A third view is that the concurrence of a constitutional and a local cause is necessary for the production of cancer. Without entering into an examination of these opinions, it appears evident that a constitutional element cannot be excluded in view of such well-known facts as a hereditary liability to cancer, and also of its occasional appearance in several parts of the body at one time.

The hereditary tendency in some persons to this disease has long been recognized by medical men; but its extent was not accurately ascertained till Sir James Paget affirmed, as the result of his observations, that in one out of every three cases of cancer a family history of the malady could be traced, and further, that even this probably does not represent the whole extent of the hereditary predisposition to cancer.

Cancer is essentially a disease of degeneracy, all statistics going to show its relatively great frequency after middle

life; and the mortality, according to Dr Walshe, goes on increasing with each decade until the eightieth year. Cancer may, nevertheless, attack persons of any age, and instances of its occurrence are not unknown even among young children. It affects females to a much larger extent than males,—this, however, being fully explained by the greater liability of the female breast and of the uterus to the disease than any other organs of the body; for, apart from this, cancer is quite as common among men. It occurs equally among all ranks of life.

The commencement of a cancerous growth is frequently attributed to some local injury, as in the case of blows on the breast, or in the well-known instance of cancer of the lip following the irritation produced by smoking a short clay pipe. But it is only as exciting causes that the influence of such injuries can be admitted; and there must still remain, as necessary to account for the disease, some antecedent condition of the system which gives the particular direction to the form of morbid action in the part.

Cancer tends to advance steadily to a fatal termination, but its duration varies in different cases according to the part affected, and according to the variety of the disease. Soft cancer affecting important organs of the body often proves fatal in a few months, while, on the other hand, cases of hard or epithelial cancer may sometimes last for several years; but no precise limit can be assigned for any form of the disease. In some exceptionally rare instances cancerous growth may exist for a great length of time, and undergo a kind of spontaneous cure, or at least prolonged arrestment.

With respect to the treatment of cancer the only hope of success lies in the entire removal of the disease. This can obviously be only accomplished where the growth affects parts which are within reach of the surgeon. When in such cases the tumour is of recent formation, is limited in its extent, does not largely affect the neighbouring lymphatic glands, and has not as yet produced any marked deterioration of the general health, the surgeon is warranted in operating. Although it must be admitted that the results are generally disappointing from the intense tendency of the disease to recur sooner or later, yet the relief to suffering and the prolongation of life obtained are alone sufficient to justify operative interference when otherwise admissible, not to mention the fact that in some rare instances a cure has thus been achieved. Nor is the view of the constitutional and hereditary nature of cancer necessarily inconsistent with the adoption of such remedial measures,—since, from the analogy of other hereditary diseases, it is probable that these influences are more potent at certain times of life, and that by prompt treatment the period of special liability may be tided over, although the inherent tendency cannot be eradicated. When from the extent of the disease or its existence in internal organs no attempt at removal can be made, all that can be hoped for is the relief of suffering, and it is certain that even in such circumstances much may be done by appropriate medical treatment. It is painful to think how many of the unfortunate sufferers from this malady place themselves in the hands of ignorant persons who profess to be able to cure cancers, but whose violent remedies, if they do not actually destroy life, as has often been the case, only aggravate suffering and entail disappointment.

Cancer is known to occur in many of the lower animals, being probably most common among the domestic tribes, but it presents no special peculiarities as a disease beyond those already referred to. (J. O. A.)

CANCERIN, FRANZ LUDWIG VON (1738-1796), a German mineralogist and metallurgist, was born in 1738 at Breitenbach. After acting as professor and holding municipal offices in Hesse and at Altkenirehen, he at