

vince of Persia, corresponding to the ancient Atropatene. It is separated from a division of the Russian Empire on the N. by the River Araxes, and from Irak on the S. by the Kizil-Uzen, or Golden Stream, while it has the Caspian Sea and Ghilan on the E., and Asiatic Turkey on the W. Its area is estimated at 25,280 square miles. The country is superior in fertility to the southern provinces of Persia. It differs entirely from the provinces of Fars and Irak, as it consists of a regular succession of undulating eminences, partially cultivated, and opening into extensive plains such as Anjan, Tabreez, and Urumiyah or Van. Near the centre of the province the mountains of Sahend or Serhund rise in an accumulated mass to the height of 9000 feet above the sea. The highest point, Mount Sevellan, towards its eastern frontier, attains a height of about 12,000 feet according to some authorities, but according to Khanikoff, it is 15,400; and the Talish Mountains, which run from N. to S. parallel to, and at no great distance from, the Caspian, have an altitude of 7000 feet. Except the boundary rivers already mentioned, there are none of any great extent; but these both receive a number of tributaries from the province, and several streams of considerable volume, such as the Jughut, the Agi, and the Shar, belong to the basin of the Lake Urumiyah. This lake is about 300 miles in circumference, and 4200 feet above the sea. Its waters are more intensely salt than the sea, and it is "supposed to contain no living creature except a kind of polype;" but it is the resort of great flocks of the flamingo. The country to the N. and W., namely, the districts of Urumiyah and Selmart, is the most picturesque and prosperous part of Azerbaijan; yet even here the traveller from the more civilised regions of Europe laments the want of enterprise among the inhabitants. Azerbaijan is on the whole, however, reckoned one of the most productive provinces of Persia, and the villages have a more pleasing appearance than those of Irak. The orchards and gardens, in which they are for the most part embosomed, yield delicious fruits of almost every description, which are dried in large quantities. Provisions are cheap and abundant, and wine is made in considerable quantities. There is throughout the district a lack of forests and of timber trees. Lead, copper, saltpetre, sulphur, and coal are found within the confines of Azerbaijan; also a kind of beautiful transparent marble or jasper, which takes the highest polish, and is used in the buildings of Tabreez, Shiraz, and Ispahan, under the name of Tabreez or Belghami marble. There are exports of silk and cotton, textile fabrics, leather, hides and lambskins, dry-fruits, sugar, drugs, tobacco, and wax, &c., the total value in 1870, a year of great trade depression, being £422,632. In the same year the imports amounted to £1,094,717. The chief towns are Tabreez, Urumiyah (the supposed birthplace of Zoroaster), Ardebil, Khoei, Maragha, Dilman, Abbasabad, Mehrand, Siral, and Souj-Bolak. The climate is healthful—in summer and autumn hot, but cold in winter. The cold is severely felt by the lower orders, owing to the want of fuel, for which there is no substitute except dried cow-dung, mixed with straw. The spring is temperate and delightful in the plains, but on the mountains snow lies eight months in the year; and hail-storms are so violent as frequently to destroy the cattle in the fields. The best soils yield from fifty to sixty fold when abundantly irrigated; and supplies of water for this purpose are drawn from the many small rivers by which the province is intersected. Oxen are generally used to draw the plough. The population is of a very varied character, comprising Kurds, Armenians, Syrians, Tatars, Persians proper, and other tribes or nationalities, and is roughly estimated at 2,000,000. The Persian army is largely composed of natives of Azerbaijan, who make ex-

cellent soldiers; they are subject to compulsory enlistment. The province is under the government of the heir-apparent to the Persian throne. (Kinneir's *Geographical Memoir of the Persian Empire*, 1813; Fraser's *Travels and Adventures in the Persian Provinces on the Caspian Sea*; Rawlinson's "Tabriz to Takhti Suleiman," in *Jour. of Roy. Geog. Soc.*, 1840; Chesney's *Euphrates and Tigris Expedition*, 1850; Abbott's "Memorandum" in *Proc. of Roy. Geog. Soc.*, 1864.)

AZIMGARH, a district and city in the Benares division of British India, and under the jurisdiction of the Lieutenant-Governor of the North-Western Provinces, lies between 25° 38' 3" and 26° 24' 45" N. lat., and 82° 44' 15" and 84° 10' 45" E. long. It is bounded on the N. by the river Ghagra, separating it from Gorakhpur district; on the E. by Ghazipur district and the river Ganges; on the S. by the districts of Jaunpur and Ghazipur; and on the W. by Jaunpur and the Oudh district of Faizabad. Its area in 1872 was returned at 2494 square miles, of which 1268 square miles are under cultivation, 344 square miles are cultivable waste, and the remaining 882 square miles are barren and uncultivable. The population of the district in 1865 was 1,385,872 souls, of whom 1,184,689 were Hindus, and 201,183 Mahometans. The pressure of the population on the soil averaged 555 per square mile. The census of 1872 discloses a population of 1,531,410, of whom 1,333,805 were Hindus, 197,581 Mahometans, and 24 Christians and others; the pressure of the population on the land being 614 per square mile. The portion of the district lying along the banks of the Ghagra is a low-lying tract, varying considerably in width; south of this, however, the ground takes a slight rise. The slope of the land is from north-west to south-east, but the general drainage is very inadequate. Roughly speaking, the district consists of a series of parallel ridges, whose summits are depressed into beds or hollows, along which the rivers flow; while between the ridges are low-lying rice lands, interspersed with numerous natural reservoirs. The principal streams are the Tons, Sarjú, Khárd, Kunwar, Majhor, Mangá, Udantí or Aurá, and the Bhansái. The chief lines of road traffic are the following:—(1.) From Gorakhpur to Ghazipur, running north and south; (2.) from Gorakhpur to Azimgarh town, in a north-easterly and south-westerly direction, and continued thence to Jaunpur cantonment; (3.) from Ghazipur to Azimgarh, and thence on to Faizabad in Oudh; (4.) from Ghazipur to Lucknow. The soil is fertile and very highly cultivated, bearing magnificent crops of rice, sugar-cane, and indigo. The principal industries of the district are cotton and silk manufactures, the total value of which in 1872 amounted to £109,081. The settlement of the land revenue in 702 estates or mahals is fixed and permanent; in the remaining 3284 estates a settlement was made by Mr Thomson in 1836 for thirty years, and is now (1873) undergoing revision. The total revenue of the district from all sources amounted in 1870-71 to £187,464; the expenditure in the same year being £172,550. Six towns are returned by the census of 1872 as containing a population of upwards of 5000 inhabitants—viz., Azimgarh (the capital of the district), population 15,893; Mau-Náth Bhanjan, 13,765; Mubarakpur, 12,068; Sikandarpur, 5239; Dubarí, 5014; and Pur, 5213. The municipalities are as follows:—Azimgarh city: the municipal income, which is derived from octroi, amounted in 1872 to £1233, 2s., the average incidence of taxation being 1s. 6½d. per head of the population. Mau-Náth Bhanjan, municipal income £125, 8s.; Mubarakpur, £112, 16s.; and Sikandarpur, £48. The cost of the municipal police of these three towns is levied by means of a direct cess on house occupiers. The total number of schools in Azimgarh district in 1871-72 was 286, attended

by 4271 Hindu and 3813 Mahometan pupils. The force necessary for the protection of person and property in 1871-72 consisted of 673 regular police, equal to 1 man to every 370 square miles of area, or 1 to every 2275 inhabitants; besides a village watch or rural police force consisting of 2538 men, equal to 1 watchman to every 0.98 square miles, or 1 to every 603 inhabitants.

AZIMGARH CITY, the principal place in the district of the same name, is situated on the river Tons, in 26° 0' N. lat., and 83° 14' E. long. The city is said to have been founded about 1620 by a powerful landholder named Azim Khán, who owned large estates in this part of the country. For municipal income and population, see above.

AZO, a distinguished professor of civil law in the university of Bologna, and a native of that city. He was the pupil of Joannes Bassianus, who taught at Bologna towards the end of the 12th century, and who was the author of the famous *Arbor Actionum*. Azo, whose name is sometimes written Azzo and Azzolenus, and who is sometimes described as Azo Soldanus, from the surname of his father, occupied a very important position amongst the gloss-writers, and his *Readings (Lectura) on the Code*, which were collected by his pupil, Alexander de Sancto Egidio, are considered by Savigny, a most competent judge, to be the most valuable of the works of that school which have come down to us.

AZOFF, or ASOV (in Turkish, *Asak*), a town on the left bank of the southern arm of the Don, about 20 miles from its mouth. Its identification with the ancient Tanais and the mediæval Tana seems erroneous; but it was long a place of great importance both as a military and commercial position. Peter the Great obtained possession of it after a protracted siege in 1696, and did a great deal for the security and prosperity of the town. At the peace of 1711, however, he had to restore it to the Turks; and it was not till 1774 that it was finally united to the Russian empire. Since then it has greatly declined, owing to the silting up of its harbour and the competition of the city of Taganrog. Its population, principally engaged in the fisheries, numbers, according to Russian statistics, 16,791.

AZOFF, THE SEA OF, an inland sea of Southern Europe, communicating with the Black Sea by the Strait of Yenikale, the ancient *Bosphorus Cimærius*. To the Romans it was known as the *Palus Mæotis*, from the name of the neighbouring people, who called it in their native language *Temarendá*, or Mother of Waters. Possibly to account for the outward current into the Black Sea, it was long supposed to possess direct communication with the Northern Ocean, and, when it was discovered that there was no visible channel, recourse was had to a "secret sluice;" there being, it was thought, but a comparatively narrow isthmus to be crossed. In some prehistoric time, according to Pallas and Murchison, a connection with the Caspian Sea seems to have existed; but no great change has taken place in regard to the character or relations of the Sea of Azoff since our earliest records. It lies between 45° 20' and 47° 18' N. lat., and between 35° and 39° E. long., its length from S.W. to N.E. being about 235 miles, and its greatest breadth 110. It is for the most part comparatively shallow; the deepest portion forming as it were a prolongation of the bed of the Don, its largest and, indeed, its only very important tributary. Near the mouth of that river the depth varies from 3 to 10 feet, and the greatest depth does not exceed 44 feet. Fierce and continuous winds from the E. prevail during July and August, and in the later part of the year those from the N.E. and S.E. are not unusual. A great variety of currents are thus produced, and the relative depths of the different parts of the sea are greatly modified. From December to March the whole surface is generally frozen.

The water is for the most part comparatively fresh, but differs considerably in this respect according to locality and current. Fish are so abundant that the Turks use the name *Balik-Denis*, or Fish-Sea. To the W., separated from the main basin by the long, narrow spit of Arabat, lies the remarkable series of lagunes and marshes known as the Sivash, or Putrid Sea. Here the water is intensely salt, and at the same time swarms with life. The Sea of Azoff is of great importance to Russian commerce, and a number of flourishing cities have grown up along its shores. Of these the most important are Taganrog, Berdiansk, Mariupol, and Yenikale. Unfortunately, there is a lack of safe and commodious harbours and roads.

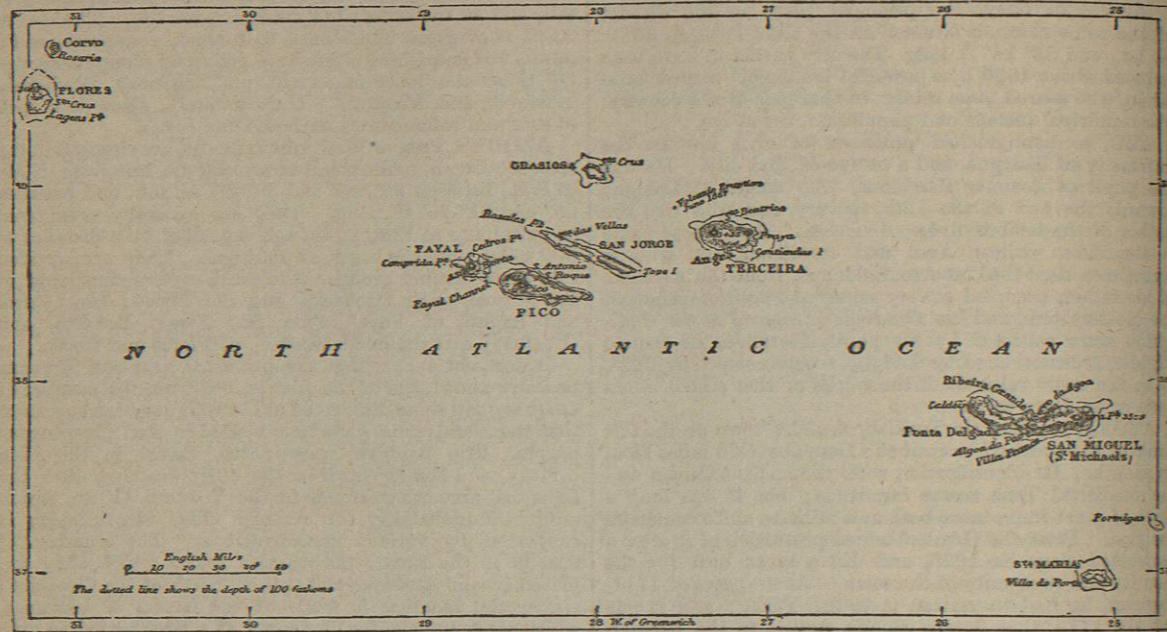
AZORES, THE, or WESTERN ISLANDS, are situated in the Atlantic Ocean, and extend in an oblique line from N.W. to S.E., between 36° 55' and 39° 55' N. lat., and between 25° and 31° 16' W. long. They are generally considered as pertaining to Europe, though separated by a distance of 800 miles from the coast of Portugal. They are divided into three distinct groups: the south-eastern consisting of São-Miguel, or St Michael's, and Sta Maria; the central and largest, of Fayal, Pico, São Jorge, Terceira, and Graciosa; and the north-western, of Flores and Corvo.

It does not appear that the ancient Greeks and Romans had any knowledge of the Azores, but from the number of Carthaginian coins discovered at Corvo it has been supposed that the islands must have been visited by that adventurous people. The Arabian geographers, Edrisi in the 12th century, and Ibn-al-Wardi in the 14th, describe, after the Canaries, nine other islands in the Western Ocean, which are in all probability the Azores. This identification is supported by various considerations. The number of islands is the same; the climate under which they are placed by the Arabians makes them north of the Canaries; and special mention is made of the hawks or buzzards, which were sufficiently numerous at a later period to give rise to the present name (Port. *Açor*, a hawk.) The Arabian writers represent them as having been populous, and as having contained cities of some magnitude; but they state that the inhabitants had been greatly reduced by intestine warfare. The Azores are first found distinctly marked in a map of 1351, the southern group being named the Goat Islands (*Cabreras*); the middle group, the Wind or Dove Islands (*De Ventura sive de Columbibus*); and the western, the Brazil Island (*De Brazi*)—the word Brazil at that time being employed for any red dye-stuff. In a Catalan map of the year 1375 the island of Corvo is found as *Corvi Marini*, and Flores as *Li Conigi*; while São Jorge is already designated San Zorze. It has been conjectured that the discoverers were Genoese, but of this there is not sufficient evidence. It is plain, however, that the so-called Flemish discovery by Van der Berg is only worthy of the name in a very secondary sense. According to the usual account, he was driven on the islands in 1432, and the news excited considerable interest at the court of Lisbon. The navigator, Gonzalo Velho Cabral—not to be confounded with his greater namesake, Pedro Alvarez Cabral—was sent to prosecute the discovery. Another version relates that Don Henry of Portugal had in his possession a map in which the islands were laid down, and that he sent out Cabral through confidence in its accuracy. The map had been presented to him by his brother, Don Pedro, who had travelled as far as Babylon. Be this as it may, Cabral reached the island, which he named Santa Maria, in 1432, and in 1444 took possession of St Michael's. The other islands were all discovered by 1457. Colonisation had meanwhile been going on prosperously; and in 1466 the Azores were presented by Alphonso V. to his aunt, Isabella, the duchess of Burgundy. An influx of Flemish settlers followed, and the islands became known for a time as the

Flemish Islands. From 1580 to 1640 they were subject to Spain like the rest of the Portuguese kingdom, of which they now form a province. At that time the Azores were the grand rendezvous for the fleets on their voyage home from the Indies; and hence they became a theatre of that maritime warfare which was carried on by the English

under Queen Elizabeth against the Peninsular powers. The connection with England has long since been of a more peaceful description; no other country affording such a ready market for Azorean productions.

The islands are now divided into three administrative districts, which take their names from the chief towns of



Map of the Azores or Western Islands.

Angra in Terceira, Horta in Fayal, and Ponta-Delgada in St Michael's—the first of the three being also the capital of the islands. The most of the inhabitants are of Portuguese origin, but there is a mixture not only of Flemish but Moorish blood. Negroes, Mulattoes, English, Scotch, and Irish immigrants are present in considerable numbers, especially in San Miguel and Fayal. Education is in a very backward state, the great proportion of the lower classes being unable to read or write. Progress, however, is being made in this as well as other respects.

Under the active administration of Pombal, considerable efforts were made for the improvement of the Azores, but the stupid and bigoted Government which followed rather tended to destroy these benefits, and to create a retrograde course. Towards the beginning of the present century, the possession of the islands was contested by the claimants for the crown of Portugal. The adherents of the constitution, who supported against Miguel the rights of Maria da Gloria, obtained possession of Terceira in 1829, where they succeeded in maintaining themselves, and after various struggles, Queen Maria's authority was established over all the islands. She resided at Angra from 1830 to 1833.

The aspect of all the islands is very similar in general characteristics, presenting an elevated and undulating outline, with little or no table-land, and rising into peaks, of which the lowest (that of Sta Maria) is 1889 feet, and the highest (that of Pico) 7613 feet above the level of the sea. Their lines of sea-coast are, with few exceptions, high and precipitous, with bases of accumulated masses of fallen rock, in which open bays, or scarcely more enclosed inlets, form the harbours of the trading towns. The volcanic character of the whole archipelago is very obvious, and has been abundantly confirmed by the numerous earth-

quakes and eruptions which have taken place since its discovery. Hitherto the western group of Flores and Corvo has been quite exempt, Graciosa has been equally undisturbed, and Fayal has only suffered from one eruption, in 1672. The centre of activity has for the most part been St Michael's, while the neighbouring island of Santa Maria has altogether escaped. In 1444-45 there was a great eruption at St Michael's, of which, however, the accounts that have been preserved exaggerate the importance. In 1522 the town of Villa Franca, at that time the capital of the island, was buried, with all its 6000 inhabitants, during a violent convulsion. In 1572 an eruption took place in the island of Pico; in 1580 St George was the scene of numerous outbursts; and in 1614 a little town in Terceira was destroyed. In 1630, 1652, 1656, 1755, 1852, &c., St Michael has been visited with successive eruptions and earthquakes, several of them of great violence. On various occasions, as in 1638, 1720, 1811, and 1867, subterranean eruptions have taken place, which have sometimes been accompanied by the appearance of temporary islands. Of these the most remarkable was thrown up in June 1811, about half a league from the western extremity of St Michael's. It was called Sabrina by the commander of the British man-of-war of that name, who witnessed the phenomenon. Details will be found in a valuable chapter of Hartung's *Die Azoren*, p. 99, and in the 23d vol. of the *Philosophical Transactions*.

The climate is particularly temperate and equable, the extremes of sensible heat and cold being, however, increased by the humidity of the atmosphere. This is so great that paper-hangings will not adhere to the walls, and the venering of furniture strips off. The range of the thermometer is from 45° Fahr., the lowest known extreme, or 48°, the

ordinary lowest extreme of January, to 82°, the ordinary, or 86°, the highest known extreme of July, near the level of the sea. Between these two points (both taken in the shade) there is from month to month a pretty regular gradation of increase or decrease, amounting to somewhat less than four degrees (*Geographical Journal*, vol. xv.) In winter the prevailing winds are from the north-west, west, and south; while in summer the most frequent are the north, north-east, and east. The weather is often extremely stormy, and the winds from the west and south-west render the navigation of the coasts very dangerous.

The general character of the flora is decidedly European, no fewer than 400 out of the 478 species generally considered as indigenous belonging likewise to that continent, while only four are found in America, and forty are peculiar to the archipelago. Vegetation in most of the islands is remarkably rich, especially in grasses, mosses, and ferns, heath, juniper, and a variety of shrubs. Of tall-growing trees there was, till the present century, an almost total lack; but through the exertions of José de Canto and others the Bordeaux pine, the European poplar, the African palm-tree, the Australian eucalyptus, the chestnut, the tulip-tree, the elm, the oak, and many others, have been successfully introduced into one or more of the islands. The orange, the apricot, the banana, the lemon, the citron, the Japanese medlar, and the pomegranate, are the common fruits, and various other varieties are more or less cultivated. At one time much attention was given to the growing of the sugarcane, but it has now for the most part been abandoned. The culture of woad introduced in the 16th century also belongs to the past. A kind of fern (*Dicksonia culcita*), called by the natives *cabellino*, and common throughout the archipelago, furnishes a silky material for the stuffing of mattresses, which forms an article of export to Brazil and Portugal.

The mammalia of the Azores are limited to the rabbit, weasel, ferret, rat (brown and black), mouse, and bat, in addition to domestic animals. Among the fish caught off the coast may be mentioned the mullet, the tunny, the bonito. The numbers of birds are so remarkable that in St Michael's, where a reward is given for the destruction of the blackbird, the bullfinch, the redbreast, the chaffinch, and the canary, the sum paid annually represents a death-toll of 420,000. The game includes the woodcock, red partridge (introduced in the 16th century), quail, and snipe.

St Michael's, the largest and most populous of the islands, has an area of 224 square miles, and 105,404 inhabitants. The east end rises from a bluff cliff, from 1200 to 1400 feet high, to a lofty inland peak, whence a central range, varying in height from 2000 to 2500 feet, runs to the westward, terminating in the Serra da Agoa de Paõ, 3060 feet above the sea. The sea-coast gradually declines in approaching the last point, where it is not more than about 100 feet high. The middle part of the island is lower, and more undulating; its western extremity being marked by the conspicuous Serra Gorda, 1574 feet above the sea; its shores on both sides are low, broken, and rocky. The aspect of the western portion of the island is that of a vast truncated cone, irregularly cut off at an elevation of about 800 feet, and falling on the N., S., and W. sides to a perpendicular coast of between 300 and 800 feet high. In the higher parts an undergrowth of shrubs gives the mountains a rich and wooded appearance. Like all volcanic countries, the face of the island is uneven and irregular, being deeply excavated by numerous ravines, and roughened by streams of semi-vitrified and scoriaceous lava, that resist all atmospheric influences and repel vegetation. Heavy rains falling on the mountains afford a constant supply of water to four lakes at the bottom of extinct craters, and a number of minor reservoirs, and through them to small streams

running rapidly down on all sides into the sea (*Geographical Journal*, vol. xv.)

Hot springs abound in many parts of the island, and from almost every crevice vapour is seen issuing. But the most remarkable phenomena are the Caldeiras or boiling fountains, which rise chiefly from a valley called the Furnas, near the western extremity of the island. The water ascends in columns to the height of about 12 feet, after which it dissolves in clouds of vapour. The ground in the immediate vicinity is entirely covered with native sulphur, like hoar frost. At a small distance is the Muddy Crater, the vertex of which, 45 feet in diameter, is on a level with the plain. Its contents are in a state of continual and violent ebullition, accompanied by a sound resembling that of a tempestuous ocean. Yet they never rise above its level, unless occasionally to throw to a small distance a spray of the consistence of melted lead. The Furnas abounds also in hot springs, some of them of a very high temperature. There is almost always, however, a cold spring near to the hot one. These springs have for a considerable period been greatly resorted to in cases of palsy, rheumatism, scrofula, and similar maladies, and bath-rooms and various conveniences for visitors have been erected.

The plains are fertile, producing wheat, barley, and Indian corn; whilst vines and oranges grow luxuriantly on the sides of the mountains. The plants are made to spring even from the interstices of the volcanic rocks, which are sometimes blasted to receive them. Raised in this manner, these fruits are said to be of superior quality; but the expense of such a mode of cultivation necessarily restricts it. The western part of the island yields hemp, which might be raised to a considerable extent. The exports consist of wine, fruit, and provisions, the most important trade being in oranges. Foreign intercourse was at one time confined rigorously to Lisbon; but the inhabitants now trade directly with England, America, and other countries. The exports during 1872 at the port of St Michael's were of the value of £85,279, and the imports amounted to £91,943.

The principal town in the island is Ponta-Delgada, which contains 15,520 inhabitants. It is built with tolerable regularity, the streets being straight and broad. The religious edifices are numerous and elegant. The harbour receives only small vessels; those of larger size must anchor in an open roadstead, which cannot be occupied during the prevalence of southerly gales. A breakwater and harbour of refuge have been in process of construction for a number of years; and a lighthouse is being built at the north-east end of the island. The other towns are Villa Franca, Ribeira Grande, Alagoa, Agoa de Paõ, &c.

St Mary is a small island immediately adjacent to St Michael's, through the medium of which its trade is conducted, as it has no good harbours of its own. It has an area of 36 square miles, and produces wheat in abundance, of which a considerable quantity is exported. Various volcanic rocks are the predominant formations, but beds of limestone also occur, giving rise to numerous stalactite grottoes all over the island. Population from 7000 to 8000.

Terceira (so called as being the third in order of discovery) is smaller than St Michael's, but being placed in a more central position with respect to the other islands, has been chosen as the seat of government. The port of Angra, protected by Mt. Brazil, is also superior to any of those in St Michael's. This island does not exhibit nearly the same extensive traces of volcanic action; and the summits of its mountains are generally level. It abounds in grain and cattle; but the wines are inferior, and fruits are raised merely for internal consumption. The number of inhabitants is estimated at 50,000.

Fayal (so called from the extreme abundance of the *faya*, an indigenous shrub) is the most frequented of all the Azores, after St Michael's, as it has one of the best harbours in the islands, and lies directly in the track of vessels that are crossing the Atlantic in any direction. Its principal town is Villa de Horta, with a population of 7636. The town is defended by two castles and a wall, both in decay, and serving rather for show than strength. The city contains two convents for monks and three for nuns, with eight churches. The bay is two miles in length and three-quarters of a mile in breadth, and the depth of water from 6 to 20 fathoms. Though a good roadstead, it is not altogether free from danger in S.S.W. and S.E. winds. The women of this island manufacture fine lace from the agave thread, and till recently produced large quantities of open-work stockings. They also execute carvings in snow-white fig-tree pith, and carry on the finer kinds of basket-making. A small valley, called Flemengos, still perpetuates the name of the Flemish settlers, who have left their mark on the physical appearance of the inhabitants. Population, 26,264.

A considerable quantity of wine used to be exported from Fayal under the name of Fayal wine, which was really the produce of Pico, one of the most remarkable of the Azores. This island is composed of an immense conical mountain, rising to the height of 7613 feet, and bearing every trace of volcanic formation. The soil consists entirely of pulverised lava. All the lower parts of the mountain used to be in the highest state of cultivation, and covered with vine and orange plantations. But in 1852 the vines were attacked by the *Oidium* fungus and completely destroyed, while the orange-trees suffered almost as much from the *Coccus Hesperidum*. The people were consequently reduced to want, and forced to emigrate in great numbers. The planting of fig-trees and apricots alleviated the evil, and after a time many of the emigrants returned. Pico also produces a valuable species of wood resembling, and equal in quality to, mahogany. Population, 24,000.

Graciosa and St George are two small islands, situated between Fayal and Terceira. Graciosa, as its name imports, is chiefly noted for the extreme beauty of its aspect and scenery. The chief town is Sta Cruz, and the total population 8000. The only manufacture is the burning of bricks. The chief town of St George is Velas, and the population 18,000.

The two small islands of Corvo and Flores seem but imperfectly to belong to the group. They lie also out of the usual track of navigators; but to those who, missing their course, are led thither, Flores affords good shelter in its numerous bays. Its poultry is excellent; and the cattle are numerous, but small. It derives its name from the abundance of the flowers that find shelter in its deep ravines. Population of Corvo, 1000, and of Flores, 10,508.

See Hartmann's *Edrisi*; *Voyages des Hollandais*, tome 1; Astley's *Collection*, vol. 1; Masson's "Account of St Miguel," in *Phil. Trans.*, 1778; Cook's *Second Voyage*; Adanson's *Voyage to Senegal*; *History of the Azores*, London, 1813, and the review of this work in the *Quarterly* for 1814; Boid's *Azores*; *London Geographical Journal*; *A Winter in the Azores*, by J. and H. Bullar, 1841; Hartung's *Die Azoren in Aeusserer Erscheinung u. Geognost. Natur*, Leipzig, 1860; Morelet's *Iles Açores*, 1860; Drouet's *Elémens de la Faune Açorienne*, 1861; Drouet's *Mollusques Marins des Iles Açores*, 1858; Drouet's *Lettres Açoriennes*, 1862; Ramos (Dr A. G.), *Noticia do Archipelago dos Açores*, &c., 1871; Godman's *Nat. Hist. of the Azores*, 1870; "Voyages aux Açores," by Fouqué in the *Revue des Deux Mondes*, 1873; "Allgemeine Charac. des Klimas" in *Hydro. Mitth. vom Hydr. Bur. der Adm.*, Berlin, 1873; Kerhallet's *Descr. de l'Archip. des Açores*, 1851, translated by Totten, 1874.

AZOTUS, the name given by Greek and Roman writers to Ashdod, or Eshdod, an ancient city of Palestine, now represented by a few remains in the little village of Esdud, in the pashalik of Acre. It was situated a short distance

inland from the Mediterranean, on the usual military route between Syria and Egypt, about 18 geographical miles N.E. of Gaza. As one of the five chief cities of the Philistines, and the seat of the worship of Dagon, it maintained, down even to the days of the Maccabees, a vigorous, though somewhat intermittent, independence against the power of the Israelites, by whom it was nominally assigned to the territory of Judah. In spite of its being dismantled by Uzziah, and somewhat later, in 731 B.C., captured by the Assyrians, it was strong enough in the next century to resist the assaults of Psammethichus for twenty-nine years. Restored by the Roman Gabinus from the ruins in which it had been left by the Jewish wars, it was presented by Augustus to Salome, the sister of Herod. It became the seat of a bishop early in the Christian era, but seems never to have attained any importance as a town.

AZPETIA, a town of Spain, in the province of Guipuzcoa, on the left bank of the Urola, 15 miles S.W. of San Sebastian. The neighbouring country is fertile, and quarries of marble are wrought in the mountains. During the Carlist movement in 1870-74, Azpetia was the seat of the Guipuzcoan *Diputacion*, or court for the management of the war; and gunpowder, cartridges, and cannon were manufactured in the town. The famous monastery of San Ignacio, dedicated to Loyola, about a mile distant, was also appropriated for military purposes. Population stated at 2335.

AZTECS, the native name of one of the tribes that occupied the table-land of Mexico on the arrival of the Spaniards in America. It has been very frequently employed as equivalent to the collective national title of Nahuatlacas, or Mexicans. The Aztecs came, according to native tradition, from a country to which they gave the name of Aztlan, usually supposed to lie towards the N.W., but the satisfactory localisation of it is one of the greatest difficulties in Mexican history. The date of the exodus from Aztlan is equally undetermined, being fixed by various authorities in the 11th and by others in the 12th century. One Mexican manuscript gives a date equivalent to 1164 A.D. They gradually increased their influence among other tribes, until, by union with the Toltecs, who occupied the table-land before them, they extended their empire to an area of from 18,000 to 20,000 square leagues. The researches of Humboldt gave the first clear insight into the early periods of their history. See MEXICO.

AZUNI, DOMENICO ALBERTO, a distinguished jurist and writer on international law, was born at Sassari, in Sardinia, in 1749. He studied law at Sassari and Turin, and in 1782 was made judge of the consulate at Nice. In 1786-88 he published his *Dizionario Universale Ragionato della Giurisprudenza Mercantile*. In 1795 appeared his systematic work on the maritime law of Europe, *Sistema Universale dei Principii del Diritto Marittimo dell' Europa*, of which a second edition was demanded in the following year. A French translation by Digeon was published in 1798, and in 1805 Azuni recast the work, and translated it into French. In 1806 he was appointed one of the French commission engaged in drawing up a general code of commercial law, and in the following year he proceeded to Genoa as president of the court of appeal. After the fall of Napoleon in 1814, Azuni lived for a time in retirement at Genoa, till he was invited to Sardinia by Victor Emmanuel I., and appointed judge of the consulate at Cagliari, and director of the university library. He resided at Cagliari till his death in 1827. Besides the works above mentioned, Azuni wrote numerous pamphlets and minor works, chiefly on maritime law, an important treatise on the origin and progress of maritime law (Paris, 1810), and an historical, geographical, and political account of Sardinia (1st ed 1799; 2d, much enlarged, 1802).

B

B is the second symbol of all European alphabets except those derived from the Cyrillic original (see ALPHABET, vol. i. p. 613), such as the Russian. In these a modified form, in which only the top of the upper loop appears, stands as the second letter, with the value of the original sound *b*; whilst the old symbol B comes third with the phonetic value *v* or *w*. In Egypt this letter was originally a hieroglyph for a crane, and afterwards represented also the sound *b*. The symbol and its phonetic value were borrowed by the Phœnicians, but not its name, as we infer from finding it called in Hebrew *beth*, i.e., a house. In its oldest known Phœnician form the upper loop only exists in a more or less rounded shape. In different alphabets even the upper loop was gradually opened, so that in the square Hebrew the original form can no longer be detected. The Greeks, when they borrowed it from the Phœnicians, closed up the lower loop as well as the upper for convenience of writing. Sometimes the loops were angular, but more generally they were rounded. There is little variation of the form, except in the old alphabets of Corinth and Corcyra, where the original is hardly recognisable. In old Latin both the rounded and the pointed loops appear.

The original sound which this symbol represented, and which it still represents in most European languages, is a closed labial, i.e., one in which perfect closure of the lips is necessary, the sound being heard as the lips open. Like all closed sounds, it is not capable of prolongation. It differs from *p*, which is also a closed labial, as a sonant from a surd. A sonant is heard when the breath, as it passes through the glottis, is vocalised by the tension or approximation of its edges. When there is no such action of the glottis, mere breath alone passes through; but the explosiveness of the breath when the vocal organs are opened produces a sound, and this is called a surd. The vocal organs are in precisely the same position for *p* as for *b*; but in producing *p* they act upon breath only; in producing *b* they articulate voice.

In the earliest stage to which we can trace back the language spoken by the forefathers of the Indo-European nations, it cannot be certainly proved that the sound *b* was ever heard at the beginning of a word. Perhaps in this position it may have been sounded indistinctly as a labial *v*. In English and all Low German languages *p* has taken the place of original *b*, which is preserved in Greek and Latin; thus the *b* in *κάνναβις* is replaced by *p* in English "hemp." We do not certainly know the reason of this shifting of sound, which affects all momentary sounds, and which is commonly known in England by the name of "Grimm's law." By the same law English *b* has taken the place of original *bh*. Thus our "beech" stands for original "bhaga," which is represented, according to the phonetic laws of the languages, by Greek *φηγός* and Latin "fagus." In the middle of a Latin word, and consequently generally in the languages derived from the Latin, *b* represents original *bh*.

There is a tendency among some peoples to allow the *b* sound to pass into a *v*, in which the lips are not firmly closed, and so the sound is capable of prolongation, because it does not consist (as *b* proper does) in the momentary escape of the voice after the lips have been compressed and then opened. This *v*, in the production of which the lips alone are concerned, must be carefully distinguished from our English *v*, which is the result of pressure between the upper teeth and lower lip; it is more like our English *w*.

It is the sound which has taken the place of *b* in modern Greek. The same confusion is found in Latin inscriptions of the 3d and 4th centuries after Christ, when the symbol *v* represents original *b*; thus *sivi* stands for *sibi*, *livido* for *libido* (see Corssen, *Aussprache*, &c., i. 131); and still more frequently *b* appears for *v*, as *bixit* for *vixit*. The change would be inconceivable if the symbol *v* in these cases had had the same sound as with us, that of a labiodental. The same indistinctness appeared locally in dialects, as is shown by Martial's well-known epigram—

"Haud temere antiquas mutat Vasconia voces,
Cui nil est aliud vivere quam bibere."

BAADER, FRANZ XAVER VON, an eminent German philosopher and theologian, born 27th March 1765 at Munich, was the third son of F. P. Baader, court physician to the elector of Bavaria. His two elder brothers were both distinguished, the eldest, Clemens, as an author, the second, Joseph, as an engineer. Franz when young was extremely delicate, and from his seventh to his eleventh year was afflicted with a species of mental weakness, which singularly enough disappeared entirely when he was introduced for the first time to the mathematical diagrams of Euclid. His progress thenceforth was very rapid. At the age of sixteen he entered the university of Ingolstadt, where he studied medicine, and graduated in 1782. He then spent two years at Vienna, and returning home, for a short time assisted his father in his extensive practice. This life he soon found unsuited for him, and he decided on becoming a mining engineer. He studied under Werner at Freiberg, travelled through several of the mining districts in North Germany, and for four years, 1792-1796, resided in England. There he became acquainted with the works of Jakob Böhme, and at the same time was brought into contact with the rationalistic 18th-century ideas of Hume, Hartley, and Godwin, which were extremely distasteful to him. For Baader throughout his whole life had the deepest sense of the reality of religious truths, and could find no satisfaction in mere reason or philosophy. "God is my witness," he writes in his journal of 1786, "how heartily and how often I say with Pascal, that with all our speculation and demonstration we remain without God in the world." Modern philosophy he thought essentially atheistic in its tendencies, and he soon grew to be dissatisfied with the Kantian system, by which he had been at first attracted. Particularly displeasing to him was the ethical autonomy, or the position that man had in himself a rule of action, that duty contained no necessary reference to God. This Baader called "a morality for devils," and passionately declared that if Satan could again come upon earth, he would assume the garb of a professor of moral philosophy. The mystical, but profoundly religious, speculations of Eckhart, St Martin, and above all of Böhme, were more in harmony with his mode of thought, and to them he devoted himself. In 1796 he returned from England, and in his passage through Hamburg became acquainted with Jacobi, the Faith philosopher, with whom he was for many years on terms of close friendship. He now for the first time learned something of Schelling, and the works he published during this period were manifestly influenced by that philosopher. Yet Baader is no disciple of Schelling, and probably, in the way of affecting the future course of Schelling's thought, gave out more than he received. Their personal friendship continued till about the year 1822, when Baader's vehement denunciation of modern