flora which has been for generations the admiration and sorrow of the botanist. According to Mr W. B. Helmsley (who has sum­marized all that is known on the matter in his report on the botany of the Atlantic Islands), @@1 the certainly indigenous species of plants are 65, the probably indigenous 24, and the doubtfully indigenous 5 ; total 94. Of the 38 flowering plants 20 are shrubs or small trees. With the exception of *Scirpus nodosus,* all the 38 are peculiar to the island ; and the same is true of 12 of the 27 vascular cryptogams (a remarkable proportion). Since the flora began to be studied, two species—*Melhania melanoxylon* and *Acalypha rubra—*are known to have become extinct; and at least two others have probably shared the same fate— *Heliotropium pennifolium* and *Demazcria obliterata. Melhania melanoxylon,* or “native ebony,” once abounded in parts of the island now barren ; but the local legislation decided that goats were of more value than ebony. Its beautiful congener *Melhania crythroxylon* (“red- wood ”) was still tolerably plentiful in 1810, but is now reduced to a few specimens. Very rare, too, has become *Pelargonium cotyledonis,* called “Old Father Live-for-ever,” from its retaining vitality for months without soil or water. *Commidendron robustum* (“gumwood”), a tree about 20 feet high, once the most abundant in the island, was represented in 1868 by about 1300 or 1400 examples ; and *Commidendron rugosum* (“scrubwood”) is confined to somewhat limited regions. Both these plants are characterized by a daisy- or aster-like blossom, which looks very strange on a tree. In general the affinities of the indigenous flora of St Helena were described by Sir Joseph Hooker as African, but Mr Bentham points out that the important element of the *Compositæ* shows, at least in its older forms, a connexion rather with South America. The exotic flora introduced from all parts of the world gives the island almost the aspect of a botanic garden. The oak, thoroughly naturalized, grows alongside of the bamboo and banana. As con­tributing largely to the general physiognomy of the vegetation must be mentioned—the common English gorse ; *Rubus pinnatus,* probably introduced from Africa about 1775 *; Hypochaeris radicata,* which above 1500 feet forms the dandelion of the country ; the beautiful but aggressive *Buddleia madagascariensis ; Physalis peru­viana* ; the common castor-oil plant; and the pride of India. The peepul is the principal shade tree in Jamestown, and in Jamestown valley the date-palm grows freely. Orange and lemon trees, once common, are now scarce. The attempt (1869-71) to introduce cinchona cultivation failed. Potatoes are probably the staple pro­duction of the St Helena farmers, and as many as three crops per annum are sometimes obtained.

The fauna of St Helena is only second in interest to its flora. Besides domestic animals the only land mammals are rabbits, rats, and mice, the rats being especially abundant and building their nests in the highest trees. Probably the only endemic land bird is the wire bird, *Aegialitis sanetse hclcnse* ; the averdevat, Java sparrow, cardinal, ground-dove, partridge (possibly the Indian *chukar),* pheasant, and guinea-fowl are all common. The pea-fowl, at one time not uncommon in a wild state, is long since exterminated. Though fresh water abounds in the island in the form of springs, rivulets, and streams, there are no freshwater fish, beetles, or shells. Of sixty-five species of sea-fish caught off the island seven­teen are peculiar to St Helena ; economically the more important kinds are gurnard, eel, cod, mackerel, tunny, bullseye, cavalley, flounder, hog-fish, mullet, and skulpin. Mr Wollaston, in *Coleoptera Sanctæ Helenas,* 1877, shows that out of a total list of 203 species of beetles 129 are probably aboriginal and 128 peculiar to the island, —an individuality perhaps unequalled in the world. More than two-thirds are weevils and a vast majority wood-borers, a fact which bears out the tradition of forests having once covered the island. The *Hemiptera* and the land-shells also show a strong residuum of peculiar genera and species. A South-American white ant *(Termes tenuis,* Hagen.), introduced from a slave-ship in 1840, soon became a real plague at Jamestown, where a considerable portion of the public library fell a prey to its voracity. The honey­bee, which throve for some time after its introduction, again died out. (Comp. Wallace, *Island Life.)*

The population of St Helena was 6444 in 1871 and 5059 (2617 males, 2442 females) in 1881 ; it consists of Government officials, of old-established residents (“ yamstalks ”) of somewhat composite origin, European and Asiatic, and of the descendants of Negroes landed from the West African slave-ships subsequent to 1840. The only town—Jamestown (3000 inhabitants)—lies in a deep valley on the north-west coast, and there is a village in the neighbouring Rupert’s Valley. Ladder Hill, the seat of the garrison, is so called from the almost precipitous ladder-like wooden stair by which its height of 600 feet can be scaled. Longwood, where Napoleon died in 1821, is a farmhouse in an elevated plain (2000 feet high), about 31/4 miles inland from Jamestown.

St Helena was discovered by the Portuguese navigator Joao da Nova on the 21st of May 1501. The island received its first known inhabitant in 1513 in the person of Fernandez Lopez, a

Portuguese of good family, who preferred being marooned to re­turning to Europe after the barbarous mutilation to which he had been subjected for some misdemeanour. Cavendish (1588), Kendall (1591), and Lancaster (1593) were the earliest English visitors. The Dutch, who had for some time been in possession of the island, withdrew in 1651, but on two occasions (1665 and 1673) managed to expel the forces of the English East India Company, which had at once seized the abandoned prize. The company, having procured a second charter of possession on 16th December 1673, remained the governing authority till 22d April 1834, when St Helena passed into the hands of the British crown. In 1832 it had purchased the freedom of the slaves (614) for £28,062. As a port of call the island continued to prosper till the opening of the Suez Canal, which, by altering the route to the East Indies, deprived the people of their means of subsistence. The revenue has decreased from £13,931 in 1874 to £10,421 in 1884, the expenditure from £14,521 to £10,806, the value of imports from £53,874 to £41,816, and of exports from £4006 to £1436. Halley the astronomer in 1676 left his name to Halley’s Mount ; and Maskelyne and Waddington visited the island in 1761.

See Seale, *Geognosy of Saint Helena* (folio plates), 1834 ; Brooke, *History of Saint Helena,* 1808 and 1824; Beatson, *Tracts,* &c., 1816; Darwin, *Geological Observations on Volcanic Islands,* 1844 ; Melliss, *Saint Helena,* 1875.

ST HELEN’S, a market-town and municipal and parlia­mentary borough of south-west Lancashire, England, is situated on a branch of the London and North-Western Railway, 21 miles west by south of Manchester and 10 east-north-east of Liverpool. It is the principal seat in England for the manufacture of crown, plate, and sheet glass, and has extensive copper smelting and refining works, as well as chemical works, iron and brass foundries, and potteries. There are collieries in the neighbourhood. The town, which is entirely of modern origin, obtained a charter of incorporation in 1868. A town-hall was erected in 1873, and there are also a public library and various institutes for affording instruction and amusement to the working-class population. Extensive drainage works have been carried out under a local Act. The corporation are the owners of the waterworks and gasworks. Enfranchised in 1885, St Helen’s returns one member to the House of Commons. The population of the borough (area, 6586 acres) in 1871 was 45,134, and in 1881 it was 57,403.

ST HELIER. See Jersey, vol. xiii. p. 635.

SAINT-HILAIRE. See Geoffroy Saint-Hilaire.

SAINT-HILAIRE, AugusTE de (1799-1853), French botanist and traveller, was born at Orleans on 4th October 1799. He began to publish memoirs on botanical subjects at an early age. In 1816-22 and in 1830 he travelled in South America, especially in south and central Brazil, and the results of his personal study of the rich flora of the regions through which he passed appeared in several books and numerous articles in scientific journals. These works are most valuable from the copious information they afford not only about the plants and other natural products but also about the native races he encountered. Those by which he is best known are the *Flora Brasiliæ Meridionalis* (3 vols. folio, with 192 coloured plates, 1825-32), published in conjunction with A. de Jussieu and Cambessède, *Histoire des plantes les plus remarquables du Brésil et de Paraguay* (1 vol. 4to, 30 plates, 1824), *Plantes usuelles des Brésiliens* (1 vol. 4to, 70 plates, 1827-28), also in conjunction with De Jussieu and Cambessède, *Voyage dans le district des Diamants et sur le littoral du Brésil* (2 vols. 8vo, 1833). His numerous articles in journals deal largely with the plants of Brazil and the general characters of its vegetation ; but Saint-Hilaire also aided much in establishing the natural system of classification on the firm basis of structural characters in the flowers and fruits ; and that he recognized the importance of the study of anomalies in this view is shown in more than one of his writings. His *Leçons de Botanique, comprenant principalement la Morphologie Végé­tale,* published in 1840, is a very comprehensive and clear exposition of botanical morphology up to 1840 and of its application to systematic botany. He died at Orleans on 30th September 1853.

*@@@*1 *Voyage of H.M.S. Challenger, Botany,* vol. i.