Gabbro occurs in the peninsula of Fethland; diorite in North- mavine between Rinas Voe and Mavis Grind ; and epidote-syenite in Dunrossness. YeÜ is formed of coarse gneiss and granitic rocks. In Unst the high ground on the west coast consists of gneiss, which is followed eastward by schists of various kinds, then by a belt of serpentine, 2 m. to a quarter of a mile in breadth, which crosses the island from S.W. to N.E. ; this is succeeded by a belt of gabbro, and finally the eastern border is again occupied by micaceous and chloritic schists. Similar rocks’ occur in Fetlar. Whalsay is built of coarse gneisses and schists. During the height of the glacial period the ice must have crossed the islands from E. to W., for many of the rocks belonging to the eastern side are found as boulders scattered over the western districts. Important formations of chromite are found at Hagdale and the Heog Hills; steatite occurs at Kleber Geo, and many interesting minerals have been recorded from these islands.

*Climate and Fauna.*—The average annual rainfall amounts to 46 in., and the mean temperature for the year is 45° 3 F., for March 39° F. and for August 54° F. The winter, which is very stormy, lasts from November to March; spring begins in April, but it is the middle of June before warmth becomes general, and by the end of August summer is gone. The summer is almost nightless, print being legible at midnight, but in winter the days are only six hours long, though the nights are frequently illuminated with brilliant displays of the *aurora borealis.* The well-known Shetland breed of shaggy ponies are in steady demand for underground work in collieries. The native cattle, also diminutive in size, with small horns and short legs, furnish beef of remarkable tenderness and flavour; while the cows, when well fed, yield a plentiful supply of rich milk. The native sheep possess many of the characteristics of goats. Ewes as well as rams generally have short horns, and the wool is long and very fine. White, black, speckled grey and a peculiar russet brown, called *mοorat,* are the prevailing colours. It is customary to pluck the wool by hand rather than shear it, as this is believed to ensure a finer second crop. Black-faced and Cheviots are also found in some places. Large numbers of geese and poultry are kept. The lochs and tarns are well stocked with brown trout, and the voes and *gios,* or narrow inlets of the sea with steep rocks on both sides, abound with sea trout. Hares, for a long period extinct, were reintroduced about 1830, rabbits are very numerous, and the northern limit of the hedge- hog is drawn at Lerwick. Whales of various species are frequently captured in the bays and sounds; the grampus, dolphin and porpoise haunt the coasts, and seals occasionally bask on the more outlying islets. Besides the commoner kinds of fishes, sharks, the torsk, opah and sunfish occur. There is an immense variety of water-fowl, in­cluding the phalarope, fulmar petrel, kittiwake, Manx shearwater, black guillemot, whimbrel, puffin and white-tailed eagle.

*Industries.*—There has been no agricultural advance corresponding to that which has taken place in Orkney, mainly owing to the poverty and insufficiency of the soil. Although there are some good arable farms in favoured districts, the vast majority of holdings are small crofts occupied mostly by peasants who combine fishing with farming. Crofting agriculture is conducted on primitive methods, spade tillage being almost universal, and seaweed the principal manure. The cottages are generally grouped in small hamlets called “ touns.” The size of the crofts varies greatly. There are several hundreds under 5 acres, but the average holding runs from 5 to 20 acres. At one time the land was held on the “ runrig ” system—that is, different tenants held alternate ridges—but now as a rule each holding is separate. About one-sixth of the total area is under cultivation, oats and barley being the chief grain, and potatoes (introduced in 1730) and turnips (1807) the chief green crops. Cabbage, said to have been introduced by a detachment of Cromwellian soldiers, is also raised, and among fruits black and red currants ripen in sheltered situations. In spite of somewhat adverse climatic conditions, live stock is reared with a fair amount of success.

The distinctive manufacture is knitted goods. The finest work is said to come from Unst, though each parish has its own speciality. The making of gloves was introduced about 1800, of shawls about 1840 and of veils about 1850. So delicate is the workmanship that stockings have been knitted that could pass through a finger-ring. Women do most of the farm work and spend their spare time in knitting. Fishing is the occupation of the men, and the real mainstay of the inhabitants. Formerly the fishery was in the hands of the Dutch, whose supremacy was destroyed, however, by the imposition of the salt tax in 1712. So complete was their control that they are estimated to have derived from it more than 200 millions sterling while it lasted. Then the fishery was neglected by the natives, who were content to use the “ sixerns,” or six-oared fishing boats, till the last quarter of the 19th century, when boats of modern type were introduced. Since 1890 the herring fishery has advanced rapidly, and the Shetland fishery district is the most important north of Aberdeen­shire. The haaf or deep-sea catch principally consists of cod, ling, torsk and saíthe. Communication with the islands is maintained by steamers from Leith and Aberdeen to Lerwick, the capital (twice a week), and to Scalloway, the former capital, and other points (once a week).

*Population.—*In 1891 the population amounted to 28,711 and in 1901 it was 28,166 or 51 persons to the sq. m. The females numbered 15,753, or 127 to every 100 males, considerably the

largest proportion to any county in Scotland. In 1901 there were 55 persons speaking Gaelic and English, none who spoke Gaelic only, and 92 foreigners (almost all Scandinavians). Only twenty-seven islands of the group are inhabited, but in the case of some of them the population consists solely of a few lighthouse attendants, shepherds and keepers.

*The Inhabited Isles.—*The following is a list of the inhabited isles, proceeding from south to north; but it will be understood that they do not lie in a direct line, that several are practically on the same latitude, that the bulk are situated off the east and west coast of Mainland, and that two of them are distinctly outlying members of the group. The figures within brackets indicated the population in 1901. Fair Isle (147) lies 24 m. S.W. of Sumburgh Head, and is 3 m. long by about 2 m. broad. The name is derived from the Norse *faar,* a sheep (a derivation better seen in the Faroe Isles). It is a hilly island, with rocky cliffs; North Haven, on the east coast, being almost the only place where landing can be safely effected. From the survivors of a vessel of the Spanish Armada that went ashore in 1588 the natives are said to have acquired the art of knitting the coloured hosiery for which they are noted. The shipwrecked sailors taught the people how to prepare dyes from the plants and lichens, and many of the patterns still show signs of Moorish origin. Mainland (19,676), the largest and principal island, measures 54 m. from N. to S., and 21 m. from E. to W., though the shores are indented to an extraordinary degree and the bulk of the island is much narrower than the extreme width would indicate. The parish of Walls, in the west, is said to contain more voes, whence its name (an erroneous rendering of the Norse *waas),* than all the rest of Shetland; while the neck of land at Mavis Grind (Norse, *maev,* narrow; *eid,* isthmus; *grind,* gate), forming the boundary between the parishes of Northmavine and Delting, is only 60 yds. wide and about 20 ft. above the sea, almost converting the north-western area of Mainland into an island. In the promontory of Eshaness may be seen some wonderful examples of sea sculpture. The Grind of the **Navir** (“ Gate of the Giants ”) is a staircase carved by the waves out of the porphyry cliffs. In the rock of Dore Holm is a natural archway, 70 ft. wide, through which the tide con- stantly surges, and to the south-east of it are the Drougs, stacks of quaint shapes, suggesting a ship in full sail, a ruin, a cowled monk and so forth. Besides Lerwick (*q.v.*) the county town, one of the most interesting places in the island is Scalloway (857), the ancient capital. According to Dr Jakob Jakob- sen, the name means the voe (*waa)* of the *skollas,* or booths, occupied by the men who came to attend the meeting of the *ting,* or open-air law court, which assembled in former days on an island in the Loch of Tingwall (hence its name), about 3 m. farther north. Scalloway stands at the head of a bay and has piers, quays, warehouses and cooperages in connexion with the fishing industry. The. ruins of the castle built in 1600 by Patrick Stewart, earl of Orkney, stand at the east end of the bay and are in good preservation. An iron ring on one of the chimneys is said to be that on which he hung the victims of his oppression. On the opposite side of the bay is Gallow Hill, the old place of execution of witches and criminals. Off the south­eastern coast of Mainland, separated by a sound 1 m. broad and usually visited from Sandwick, lies the uninhabited island of Mousa (correctly spelled Moosa, the moory isle, from the Norse *mόr,* moor), famous for the most perfect specimen of a Pictish *broch,* or tower of defence, in the British Isles. The broch, which stands on a rocky promontory at the south-west of the isle, now measures about 45 ft. in height, but as some of the top courses of masonry have fallen down it is supposed to have been 50 ft. high originally. It was entire in 1154, and was partially restored in 1861. It has a diameter at the foot of 50 ft., and at the top of 38 ft. The interior court, open to the sky, is 30 ft. in diameter, the enclosing wall having a thickness, at the base, of 15½ ft. There are three separate beehive-shaped rooms on the ground floor, which were entered from the court, from which also there was an entrance to the stair leading to the galleries, which were lighted by windows facing the court. Hevera