and may be described as the temperate and fertile belt, and is the only part of the island where reindeer still linger in any number. Near the west coast it contains some fine peaks and large glaciers. It is penetrated by the longest green valleys in Spitsbergen, *e.g.* from Coles Bay, Advent Bay and Low Sound (the valley of the Shallow river). The southern division of the island is very icy. There is a high snowfield along its east side, and ranges of peaks farther west. Two parallel ranges form the backbone of the island south of Horn Sound, the higher of them containing the famous Horn Sund Tind (4560 ft.). The long narrow island, Prince Charles Foreland, with lofty peaks, runs parallel to part of the west coast of West Spits­bergen, from which it is separated by a narrow strait. Its range of mountains is interrupted towards the southern end of the island by a flat plain of 50 sq. m. raised only a few feet above sea-level. There is a narrower depression a few miles farther north. The broad Stor (Great) Fjord, of Wybe Jans Water, separates the main island from two others to the east— Edge Island (2500 sq. m.) and Barents Land (580 sq. m.). Formerly these were considered as one, until the narrow Freeman Strait which parts them was discovered. Neither Barents Land nor Edge Island carries ice-sheets, and both are practi­cally devoid of glaciers down their western coasts, but have large glaciers reaching the sea on the east. To the north-east of West Spitsbergen, separated from it by Hinlopen Strait (7 to 60 m. in breadth) lies North-East Land, with an area of about 6,200 sq. m. Its western and northern coasts are indented by several bays and fjords. It is covered with a true ice-sheet, while the neighbouring Wiche Islands to the south-east bear no large glaciers at all. East by north from Cape Leigh Smith, the easternmost promontory of North-East Land, rises White Island, covered with snow and ice, and rising to about 700 ft. It was discovered by Cornelis Giles or Gillis in 1707, and is alterna­tively named Giles Land. Numerous small islands lie around the larger: Danes and other islands off the north-west coast of West Spitsbergen, the Seven Islands, Outger Reps, Broch, and Charles XII. Island on the north of North-East Land; Hinlopen Strait contains numerous islets, and the Ryk Yse Archipelago, Hope or Walrus Island, and the Thousand Islands (about a hundred small rocks) lie to the east and south of Edge Island.

The nomenclature is in a state of hopeless confusion, the names given by the old explorers having been carelessly trans­ferred from point to point, or capriciously set aside. The true names, English and Dutch, of the principal misnamed sites are here indicated in brackets after the current names: South Cape (Point Look-out), Torrel's Glacier (Slaadberg), Recherche Bay (Joseph’s Bay, Schoonhoven), Van Keulen Bay (Lord Ellesmere Sound, Sardammer Rivier), Van Mayen Bay (Low Sound, Klok Rivier), Coal Bay (Coles Bay), Advent Bay (Adventure Bay), St John’s Bay (Osborn’s Inlet), English Bay (Cove Comfortlesse), Foreland Sound (Sir Thomas Smith Bay, Keerwyk), Cross Bay (Close Cove), the bay called Smeerenburg (Fair Haven, Dutch Bay), Flat Hook (Fox Point), Biscayers’ Hook (Point Welcome), Redbeach (Broad Bay), Leifde Bay (Wiche Sound), Grey Hook (Castlin’s Point), Wijde Bay (Sir Thomas Smith Inlet), Verlegen Hook (Point Desire), Treuren- berg Bay (Bear Bay), Agardh Bay (Foul Sound), Stor Fjord (Wybe Jans Water), North-East Land (Sir Thomas Smith Island), North Cape (Point Purchas). Stans Foreland is not, as often appears, an alternative name of Edge Island, but the name of its south-eastern cape only.

*Geology.—*The backbone of the main island consists of an ancient mass of pre-Devonian granites, gneisses and schists forming a moun­tain chain in the western region. Resting upon these ancient crystalline rocks, the precise age of which has not been definitely determined, there is a succession of sedimentary rocks representing nearly every one of the prominent periods of geological time. For the eastern part of the group these strata lie nearly horizontal; here and there they are pierced by intrusive igneous rocks. The oldest sediments yet found are the Ordovician beds which occur at Hekla Hook, dolomites, limestones, slates and quartzites; Silurian rocks may possibly exist in the north-west; and Devonian grits with *Pier as pis* have been recorded in Lief de Bay. The Carboniferous period is represented by Culm-like rocks (classed by O. Heer as Ursien—Upper Devonian); upon these come limestones with *Spirifer Mosquenses* (Hinlopen Straits) and above these again are limestones with *Cyathophyllum* and *Fusulina∖* (Eisfjord, Bell Sound, Horn Sound, &c.). Permo-Carboniferous limestones and dolomites occur on the west on the mainland and on Prince Charles Foreland and in King James Land. Black slaty shales with large ammonites in the Calcareous nodules and beds of black, bituminous limestone represent the Trias at Cape Thorodsen ; and Rhaetic fossils are found in Research Bay, Bell Sound. Jurassic rocks are widely spread and include Bajocian, Bathonian, Callovian, Oxfordian and Portlandian (Cape Starashchin and Advent Bay); the older stages being in the west. Some of these rocks are coal-bearing. Wealden strata with coal seams and marine beds (Volgian) occur in the south, and in King Charles Land are Neocomian rocks with interbedded basalts. Plant-bearing lower Cretaceous strata have been recorded, and lower Eocene beds are found in Ice Fjord, Bell Sound containing large magnolia leaves and others; beds of London Clay age occur in Kol- bay. Miocene Sandstones and clay with lignite beds, some 2800 ft. thick, occupy the west coast about Ice Fjord, Bell Sound, Advent Bay, &c. In this period these islands were probably all united and covered a much greater area and were covered with extensive peat bogs, on the edges of which the marsh cypress flowered, dropping its leaves and blossoms into the marshes. *Sequoia,* poplars, birches, planes and large oaks also grew there, while ivy and thick underwood freely developed under their shadow, and thousands of insects swarmed in the thicket. Subsidence followed in late Tertiary times, to be succeeded by a period of rapid elevation giving origin to the raised beaches such as those seen on Prince Charles Foreland, and possibly resubmergence may be again in progress. In comparatively recent geological times this, the main island, was over most of its area a high plateau covered with an ice-sheet, which has gradually been withdrawn from the west towards the east, the western region being thus cut up into deep valleys and more or less nigged moun­tains. Farther east the mountains are more rounded, but still farther east the plateau character of the land remains.

*Climate.—*The sea around Spitsbergen is shallow, and the ice readily accumulates. round the shores. Although the glaciers of Spitsbergen do not give origin to icebergs so huge as those of Green­land, the smaller bergs and the pack-ice are thick enough to prevent access to the shores except for a few months in the year. However, the warm drift from the Atlantic sends a branch to the western shores of Spitsbergen, moderating its climate, and leaving an open passage which permits vessels to approach the western coast even under the most unfavourable conditions of ice in the arctic regions. Drift-wood from lower latitudes, glass floats of the Norwegian fishermen and other objects have been found at the northern extremity of Spitsbergen. On the other hand a cold current charged with ice descends from higher latitudes along the eastern coasts, rendering approach extremely difficult. On this account these shores long remained practically unknown.

Owing to the warm drift the climate of Spitsbergen is less severe than in the corresponding latitudes of Greenland and Smith Sound. Bear Island, notwithstanding its more southerly position, has a lower temperature. The isotherm of 23° F., which crosses the middle of Eastern Siberia, touches its southern extremity, and only the north-east coasts of Spitsbergen have an average yearly temperature so low as 14° to 10·5° . At Mussel Bay (79° 53’) the average yearly temperature is 16° (January 14·1°, July 39∙3°). Even in the coldest months of the winter a thaw may set in for a few days; but, on the other hand, snow sometimes falls in July and August. Spring comes in June; the snow becomes saturated with water and disappears in places, and scurvy grass and the polar willow open their buds. By the end of. June the thermometer has ceased to sink below the freezing-point at night; July, August and September are the best months. In September, however, autumn sets in on shore, and by the end of the month the pack-ice rapidly freezes into one solid mass. In Treurenberg Bay an annual precipitation of 64 in. has been observed.

*Fauna and Flora.—*The Greenland whale has completely disap­peared in consequence of the great havoc made by the early whalers. According to Scoresby, no less than. 57,590 whales were killed between 1669 and 1775. A great diminution, in the same way, is to be observed in the numbers of other creatures which were the object of hunters. A reckless extermination of seals was carried on. Walruses are now only occasionally seen in the waters of West Spitsbergen. Birds, also, have rapidly diminished in numbers. The fulmar petrel meets ships approaching Spitsbergen far away from the coasts. It makes colonies on the cliffs, as also do the glaucous gull and the “ burgomaster.” Rotches, black guillemots, ivory gulls, auks and kittiwake gulls breed on the cliffs, while geese, looms and snipe frequent the lagoons and small fresh-water ponds. The eider duck breeds on the islands, but its numbers have become noticeably reduced, w hile the lumme and the tern confine themselves to separate cliffs. These birds, however, are only guests in Spits­bergen, the snow-bunting being the only species which stays perma­nently; some twenty-three species breed regularly on Spitsbergen, and four others (tne falcon, snowy owl, swan and skua) come occasionally. Of land mammals, besides the polar bear, the reindeer and arctic fox have been greatly reduced; the reindeer, in fact, are approaching extinction, whereas for several years consecutively