

PREFACE

This report is an attempt to give a general description of the vegetation along the western arctic coast of America, based upon my work during the Canadian Arctic expedition, 1913-16. It is supplementary to the two preceding parts of this volume, and the scientific names used are in accordance with them.

On the way into the Arctic natural history collections and observations were made at port Clarence,¹ Bering strait (see Vol. III, Part I, pp. 4-5, and Vol. VII, Part N., pp. 3-4), though not enough to warrant the inclusion of a description of the coast south of point Barrow in this report. For a description of the topography and the vegetation of this part of the arctic coast I refer to Beechey's "Narrative of a voyage to the Pacific and Bering strait, 1825-28, London, 1831," and particularly to B. Seeman's general description in "Botany of the Voyage of H.M.S. *Herald*, under the command of Captain H. Kellett, during the years 1815-51, London, 1852." More recent descriptions are found in F. C. Schrader and W. J. Peters; "A Reconnaissance in Northern Alaska, Professional Paper No. 20, U.S.G.S. Washington, 1901," A. H. Brooks, "Geography and Geology of Alaska, Professional Paper No. 45, U.S.G.S. Washington, 1906," and J. Muir: "The Cruise of the *Corwin* 1881. New York, 1917."

As the north coast of Alaska is very uniform as to topography, geology, and natural history all the way to Mackenzie delta, it has not been considered necessary to subdivide it according to longitude. Owing to our wintering 1913-14 at Collinson point in Camden bay and extensive travelling eastward and westward along the coast and up some of the rivers, it has been possible to write special chapters dealing with the topography of the different natural areas in this region from the mountains to the sea, as well as to give a summary on the climate, based upon our meteorological observations, with particular reference to plant life. The vegetation on this part of the coast is treated in detail.

The vegetation on the low cape Bathurst peninsula is interesting enough to call for special mention based upon investigations there in July, 1916; and the same is the case with Young point south of Amundsen gulf, where observations were made in the same month. An original, general description of the topography of the coast around Franklin bay, supplied by Dr. R. M. Anderson, is also given, based on work in that region from 1909 to 1912.

As the Southern party of the Canadian Arctic expedition had its headquarters for almost two years (end of August 1914 to middle of July 1916) at Bernard harbour, on the south side of Dolphin and Union strait, detailed investigations of the vegetation, insect life, climate, etc., were possible all the year round in that vicinity. A detailed topographical map of the harbour was also made (See Figure 2); but as this will be followed up with topographical and geological descriptions in Vol. XI of the Report of the Canadian Arctic expedition, it is sufficient to give only the general features in this paper, in connection with the vegetation examined. The description takes in both the mainland coast and the islands alongside and farther off shore, a particularly interesting subject from the point of view of vegetation, exhibiting as these islands do all stages from a barren reef of boulders or sand and gravel to larger islands with almost the same number of plants as upon the mainland. A special chapter on the climate at Bernard harbour, with particular reference to the vegetation, is given, being a summary of the meteorological observations made during our stay there.

¹ For a description of port Clarence, see also A. E. Nordenskiöld: "The Voyage of the *Venera* round Asia and Europe," New York 1882, p. 564.