

VI.—*On New Species of Cretaceous Plants from Vancouver Island.*

By Sir J. WILLIAM DAWSON, F.R.S., etc.

(Read May 25, 1893.)

CONTENTS:—I. Geological Notes; II. Descriptions of Species; III. Fossil Plants in Relation to Climate and Age.

I.

The greater part of the material to which this paper relates was collected by Dr. G. M. Dawson, F.R.S., at Port McNeill, on the northeast coast of Vancouver Island, in 1885. To this has been added a collection subsequently made at the Wellington Colliery, Nanaimo, also on Vancouver Island, farther south, and some specimens obtained at the Vancouver Colliery, Nanaimo, by Mr. S. Robins, and kindly placed by him in the hands of Dr. Dawson.

A preliminary notice of the part of the collections from Port McNeill was presented to this Society in May, 1888, in which the following statements were made as to their occurrence:

"The precise locality is situated on the north shore of Port McNeill, bearing N. 65° E. (mag.) from the Eel Reef. The beds here lie at an angle of about ten degrees, or not far from horizontal; and the plants are found in shales or shaly sandstones about five feet above a small seam of coal from one to two inches thick.

"The Cretaceous rocks of the northern part of Vancouver Island appear to belong to a basin or deposition-area distinct from that of the Comox and Nanaimo districts to the south, and more closely connected with that of the Queen Charlotte Islands to the north. The best general section of the rocks in question, so far observed, is that in Quatsino Sound, where there seem to be represented the three higher members of the Cretaceous section of the Queen Charlotte Islands, as it exists in the vicinity of Skidegate Inlet. The Cretaceous rocks which extend along the northeast coast of Vancouver Island, from Port McNeill to Beaver Harbour, may in part represent the lowest or coal-bearing portion of the Quatsino section. A few fossil plants obtained at Beaver Harbour are Middle Cretaceous, and possibly referable to a horizon near that of the lowest beds at Quatsino. The Port McNeill beds are, so far as stratigraphical evidence exists, probably much later than these; but their stratigraphical position has not been fully determined, and as no fossils but plants have been found in them, these constitute the best evidence as to their precise age at present available. (See Part B, Annual Report Geological Survey of Canada, 1886.)"

This evidence, as stated in the preliminary note, would place the Port McNeill beds in the Upper Cretaceous, and not far from the horizon of the coal-measures of Comox and