

parts of the island were estimated at about 500 feet. At Eteolin harbor the rock is a gray olivine-diabase, very porous and cellular, and separated into layers which simulate horizontal bedding, but which are due to flow structure.

Part of the east coast of the island was subsequently seen from a distance, and its appearance is so similar to that of the other coasts that there can be little doubt that the island is entirely composed of nearly horizontal basaltic flows. The basalts examined are all fresh looking and unaltered, like those of Saint Paul island. The much altered sandstones reported by Dall at Eteolin harbor were not found, nor was I able to identify any volcanic cones upon this island.*

No erratics or traces of glaciation were observed on the parts of Nunivak island visited.

CAPE VANCOUVER.

Cape Vancouver, twenty-five miles distant from the eastern coast of Nunivak island, is a projecting point of Nelson island, which is to all intents a portion of the adjacent Alaskan mainland. It is a bold and high promontory, which, though scarcely to be characterized as mountainous, rises to a height of probably 1,000 or 1,500 feet. It evidently forms one of several or many projections of higher land along this part of the Alaskan coast, which are connected by broad, low, level tracts. The north shore of the cape, which alone was examined, forms scarped bluffs or cliffs, rising from the edge of the sea, and presenting fine exposures of sandstones and sandy shales, well bedded and dipping southward, at low and undulating angles. At the extremity of the cape these beds appeared to be horizontal, and on the south side, though imperfectly seen from a distance, they seem to lie at higher and more irregular inclinations.

The sandstones, where examined, are gray, bluish and brownish in color, rather soft, and sometimes nodular. They contain a few very thin and dirty seams of coal or lignite, of which the thickest seen was only a few inches. There are also in the sandstones numerous carbonaceous fragments and occasional fossil leaves, of which a couple were collected. These have been submitted to Sir J. William Dawson, who supplies the following note upon them:

"No. 1. *Juglans acuminata*, R. Braun, Heer, Flora Fossilis Alaskana, 1869, page 38. *Ib.*, Flora Fossilis Arctica, vol. I. *Ib.*, Contributions to Fossil Flora of N. Greenland. Trans. Royal Society, 1869.

"This species is stated by Heer to occur in sandstone at English bay, Alaska. It is also found at Atanekerdluk in Greenland, and is said to occur in the European

* Cf. Dall, op. cit., p. 245.