pany, may not exist. Owing however to the difficulty of obtaining outcrops over the greater portion of the district, such exploration to determine the presence of coals in workable quantity can only be economically carried on by means of boring, in which case the cable drill will possess some features superior to the diamond drill, owing to the comparative cheapness with which it can be operated in such a wilderness country.

The only place where the Cretaceous rocks were seen outside of the principal area which extends across the eastern centre of the island was an isolated patch on the southeast corner of North island. Here, shales and sandstones with conglomerates, precisely similar to the sediments seen along the north side of Skidegate channel in the vicinity of the Honna river, are exposed along the shore for nearly a mile. They dip generally S. 50° E. < 30°-40° with a roll midway to where the dip is changed for 100 yards to N. 60° E. At the northern end of the basin the shales pass beneath a mass of coarse greyish conglomerate which exactly resembles that at the Narrows west of Honna, and which there marks the base of the upper series of shales and sandstone of Richardson. These conglomerates contain pebbles of granite, hard fine-grained diabase; hard altered slate, quartz etc., with interstratified beds of coarse grits. These beds extend southeastward to the eastern entrance of the main channel between the two islands but here they are badly mixed up with the later Tertiary eruptive rocks. In this area their distribution has been defined by Dr. Dawson, (Rep, 1878-79.) No trace of coals was seen in this area, which is very limited, and apparently of no economic importance.

IGNEOUS ROCKS.

The rocks of the west coast, and in fact of the greatest portion west of a line drawn from the mouth of the Honna to Masset, are included under the head of Igneous. These are divisible into two classes, viz., those of Pre-Cretaceous and those of the later Tertiary. The former are the extension of the coast rocks of Vancouver Island and the greater part of the southern islands of the Queen Charlotte group, named by Dawson the "Vancouver series." They comprise large areas of green, generally fine-grained, diabase, felsitic rocks, sometimes porphyritic, agglomerates, etc., with which in places are limestones which contain traces of fossils, though generally of but little value for determination of horizons. These igneous rocks are the oldest known on this part of the coast. They certainly underlie the Cretaceous rocks which have just been described and may therefore be regarded as older than that series. They are penetrated by dikes and sometimes by large masses of granite, as well as by blackish green diabase rock which is more recent than the Cretaceous shales.