

THE MINERAL RESOURCES OF VANCOUVER ISLAND.*

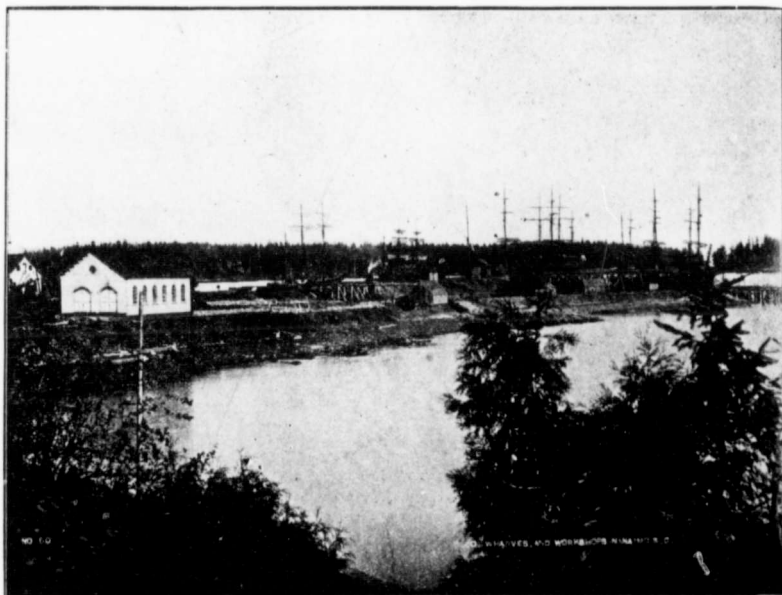
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CONSIDERED geologically in a general way, Vancouver Island is made up as follows: The coal measures through the northern and northeastern portions, with occasional masses of igneous rocks as intrusives, as for instance around Nanaimo, Cameron and Horn lakes; igneous rocks and a belt of semi-crystalline graphitic slate through the southern, southeastern and southwestern portions, with a narrow fringe of sandstones and conglomerates forming a portion of the southwestern coast line; igneous rocks and crystalline limestones through the western portion.

The geology of the greater portion of the interior of the island can only be guessed at because of the lack of

usually fully crystalline, prevail to the coast line. This condition is demonstrated by travelling down the Alberni canal to the Pacific ocean at the entrance to Barclay sound. From these premises the conclusion is apparently warranted that to the northwest the same geological conditions exist, but in addition there is the fact that around Comox as well as Hardy bay on the east coast, coal of commercial value occurs, also near the head of Quatsino sound, where the distance from the east coast to the head of the sound is only about ten miles. Along the west coast and as far into the interior as prospectors have explored, igneous rocks with the crystalline limestone (often excellent marble) are the prevailing country rocks.

Consequently from the present knowledge of the conditions of Vancouver Island, the assertion is warranted in a general way, that so far as its geology and mineral



WHARVES AT NANAIMO FROM WHICH THE COAL IS SHIPPED.

trails, the heavy timber and the luxuriant growth of salal and other underbrush which has rendered exploration or prospecting so extremely difficult that but very few men have ever attempted the task. The stage road from Nanaimo to Alberni offers a good opportunity to study the geology of that portion lying between Nanaimo bay on the east coast and the head of Alberni canal on the west. Roughly speaking, sandstones and conglomerates of the coal measures occur until Cameron lake is reached; there igneous rocks are encountered, apparently belonging to the same class as make up the southern portion of the island, especially in the vicinity of Victoria; between the lake and Alberni another comparatively narrow belt of conglomerates and sandstone occurs, but about seven miles from the town these give place to igneous rocks which, with limestone,

resources are concerned, the former is made up of igneous rocks in the extreme southern portion; a belt of semi-crystalline slates traversing the island, northerly from these igneous rocks, from the neighbourhood of Saanich peninsula, on the southeast coast, to San Juan harbor on the southwest coast; while to the northwest from these slates the island is divided into two distinct geological divisions, the sandstones, conglomerates and other sedimentary rocks, forming the eastern portion, with crystalline limestone and intrusive dykes of igneous rocks forming the western portion, except at some points along the west coast line where narrow strips of sedimentary rocks still occur, having apparently escaped destruction from the immense work of erosion which has been going on for ages. The mineral resources embrace the coal on the eastern side of the island, together with copper ores carrying low gold and silver values, together with occasional occurrences of gold-bearing quartz and immense deposits of magnetic iron ore, occur throughout the western and southeastern portions.

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