

PART IV.

OBSERVATORY INLET.

INTRODUCTORY.

Observatory inlet parallels the lower portion of Portland canal on the east, and is connected with it by a passage north of Pearce island. Its shorelines are more irregular than those of Portland canal and towards its head it divides into two branches known as Hastings arm and Alice arm. Hastings arm continues in the general northerly direction of the main inlet, while Alice arm bends to the east and like Portland canal cuts through the granitic batholith of the Coast range and penetrates for some distance the argillites and associated rocks which border it on the east.

At the junction of the two arms, the inlet expands in width and contains a number of islands, some of larger size. Larcom island has a length of 7 miles and Brooke island of 3 miles. West of Larcom island is the entrance to Goose bay, an irregular sheet of water $3\frac{1}{2}$ miles in length and from half a mile to a mile in width. The principal known mineral deposits of the inlet are situated in its vicinity.

The inlet is bordered on both sides by mountains in groups and short ranges, except near the head of Alice arm. From this point, a high rough plateau broken by basaltic cliffs extends eastward to the Nass valley. The mountains present, as a rule, steep glacier-worn sides towards the inlet, and range in height from 3,500 to nearly 6,000 feet. Glaciers occur in some of the valleys but are not so large and conspicuous as along Bear river.

The streams entering the inlet are all of moderate size. They include Falls creek, a short stream with numerous falls emptying into Goose bay, the Kitzault and Ilanci at the head of Alice arm, and a branching sediment-laden stream at the head of Hastings arm. Falls creek is utilized to operate the plant at the Hidden Creek mine. It is a steep stream and flows a large volume of water during the greater part of the year, but like all the streams of the district, the supply becomes greatly diminished during the midwinter months.