

Department of Public Works.

COWICHAN RIVER.

The Cowichan River empties into Cowichan Bay on the eastern coast of Vancouver Island.

The sum of \$1,755.61 was expended on this river during last fall in endeavouring to keep the channel clear of logs and drift timber, and otherwise protect the adjoining lands between Somenos Village, the Esquimalt and Nanaimo Railway Bridge, and the Quamichan Indian Village some two miles below.

FRASER RIVER.

Mouth of river. The work of improving the channel through the sandheads at the mouth of the river has been continued, 24 mattresses having been placed in position, two on the north jetty and 22 on the south.

During a severe gale, several mattresses both in the north and south dams showing a little above low water level, owing to the unevenness of the bottom were stripped of the cross timbers and somewhat broken up. The damage done, however, was not of great consequence and can be made good at small cost.

The dams or jetties are now approaching the most exposed position where the wind and tide will act with greatest force upon them, therefore it will be necessary to take every precaution to prevent undermining and breaking up of the mattresses which might cause the opening of back channels behind the dams.

The results, since the inauguration of the works carried on across the sandheads have been, so far, eminently satisfactory, and when completed will be, it is thought, sufficiently stable to secure a normal depth at low water of at least 18 feet, if not more.

The expenditure during the year amounted to \$9,975.26.

Garry Bush. To prevent further erosion of the bank of the Fraser River at Garry Point, which has been going on since 1885, the department undertook, during the past fiscal year, the construction of works at an expenditure \$7,941.74.

These consist of brush mattresses 100 feet long by 28 feet wide by 3 feet deep, bound together with No. 6 B. H. G., galvanized iron wire, sunk with stones side by side along the bank of the river, the upper ends resting on the sloping bank a little above low water and the lower end held firmly in place on the bottom with large stones, in depths varying from 40 feet to 50 feet at low water. Between high and low water to protect the banks from wash, mattresses are placed longitudinally, they being first evenly sloped. The length of the bank now protected is about 660 feet, extending from Steve's wharf to a short distance below where Garry Bush once stood.

Snag boat. The snag boat "Samson" has been employed during the past year in connection with the removal of snags to the number of 267 from the navigable channel of the Fraser River, in attendance on the assistant engineer while superintending the works at the mouth of the river, in taking soundings, and in recovering and replacing and otherwise attending to the buoys at the mouth of the river marking the channel over the sandheads.

SKEENA RIVER.

This river is in the northern part of British Columbia.

The work performed on the Skeena River during the last and previous winters has been of much utility, enabling the steamer "Caledonia" owned by the Hudson Bay Co. to make several trips. The expenditure last year amounted to \$2,158.18, the work performed comprising the removal of several large rocks in the Gitchi-lache Cañon, aggregating 1,000 cubic yards.

The importance of safe and reliable navigation of this river to the prosperity of the northern parts of the province is unmistakable. Hitherto all the freight has been forwarded by Indians in canoes at great risk, the goods being frequently damaged and lives lost, consequently the cost per pound was excessive, but now that the