

mountains. About 8 miles from the head a narrow arm branches off to the northward for about 3 miles & then turns to the southeast & eastward for 8 miles. Indifferent anchorage may be found at the head of the main inlet, between the 2 small streams in the south-western bight, in 35 fathoms, 400 yards from low water mark. There is also anchorage, for a small vessel, in 9 fathoms in the cove to the northward of the bight & off the entrance to the salt water lake, steadying her with a hawser to the trees. The tidal stream in the entrance of Work Channel runs about 3 knots per hour. This affects Admiralty charts 1923a & 2430, & B.C. Pilot, 1888, pg. 428.

**No. 34, June 30.—Ont. rlo —1. Private Lights in River St. Mary**—A fixed white light has been established by Jos. Rouleau, pilot, to mark the southern edge of the dredged curve opposite the beacon in the upper entrance to the Canadian Canal, at Sault Ste. Marie, Ont. The light is shown from a buoy or float moored near the black spar buoy maintained by the Government. Two range lights have been established by Mr. Rouleau on Big Point, on the U.S. side of the river, in the same alignment as the lights on the Canadian side, to show the axis of the dredged channel above the canal from the U.S. side to the turning point at the beacon. These lights will be maintained by the pilots & the Canadian Government assumes no responsibility in connection with them. This affects Admiralty charts 320 & 324, & the substance of it should be entered in the Canadian List of Lights after no. 1115.

**2.—Shoal off Gros Cap.**—The Department of Marine is advised that several vessels, drawing 17 ft. or more, have struck an uncharted shoal in the upper or Lake Superior entrance to River St. Mary, between Gros Cap & Point Iroquois. One master states that the shoal is about  $1\frac{1}{2}$  mile above Point Iroquois. The shoal is on, or a little to the eastward of, the alignment of the private lights known as Bernard's Range. Masters are advised to keep the range open a little to the westward until abreast of Point Iroquois. This notice affects Admiralty charts 320 & 324.

#### By the U.S. Hydrographic Office.

**Lake Huron—Georgian Bay Entrance—Current off Cove Island Light**—Capt. McAllister, of the C.P.R. steamer Alberta, furnishes the following information (Capt. McAllister has had 12 years' experience on the one route between Owen Sound & Fort William):

After passing Grand Manitoulin Island, bound to the southward & eastward, opening up the entrance to Georgian Bay, between Hungerford Point & Cape Hurd, the effects of a current are immediately felt. This current is variable in both force & direction, setting from Georgian Bay into Lake Huron & vice versa with great irregularity. At times this current is so strong that in thick weather it would be hazardous to attempt an entrance into Georgian Bay unless the fog horn could first be heard & its direction established.

#### Ottawa River Navigation.

A correspondent writes: "Not many years ago the C.P.R. project was regarded as chimerical. But, where its opponents claimed the railway would never earn axle-grease, it is now paying dividends. The system comprises to-day over 7,500 miles of railway, & steamship lines on the Great Lakes & the Pacific, & last year its earnings were \$24,000,000. And now the great development of the Northwest due to it is enlarging its sphere of action daily. Lately it has been found necessary to add to the facilities for handling grain at Fort

William by the erection of a steel elevator. It is safe to say that, even with this addition, the existing capacity will soon have to be again increased.

"Just as the C.P.R. has made this western expansion possible there seems reason to believe that, on the opening of the Ottawa River to through navigation, history will repeat itself, & a new era of development in Central Canada will follow. Railways are imperfect colonizers where not aided by waterways. Had the C.P.R. been all along paralleled by a cheap water route from Lake Superior westward, the Northwest would have to-day five times its present population & the railway more & better paying business. And cheap water carriage will do even more for Northern Ontario than it could for the prairies. To the grain traffic it would be a great advantage, to lumber & minerals it is an absolute necessity.

"The Ottawa route will do for this part of Canada what no other waterway project can—open new territory for occupation. In the Nipissing & Temiscaming districts in Ontario & the Upper Ottawa agencies of Quebec are several million acres of lands, equal to any in Ontario, awaiting settlers. The increase in value of these alone, owing to their being brought on a main line of traffic, should repay the entire cost of opening navigation, lands now held at 50c. an acre becoming immediately worth at least 10 times that sum. Sturgeon Falls alone is said to be the shipping point for forests estimated to contain about 2,000,000 cords of spruce. On every cord of this from \$1 to \$2 would be saved to the producers as the direct result of the opening of the waterway. About the head of Temiscaming & northward is an inexhaustible supply of the same material, tributary to the Ottawa River. The manufacture of this should employ numerous mills. Water-power is abundant. Mr. Clarke, past President of the American Society of Civil Engineers, says: 'I can unreservedly state that I know of no other place in any manufacturing country, Niagara Falls not excepted, where there is such an amount of water-power as this scheme can make available.' The amount incidentally to be developed he places at upward of 500,000 h.p. This should be worth at least from \$2,000,000 to \$3,000,000 a year when fully taken up.

"As a through route it has the advantage of directness. From the Sault to Montreal is practically an air line. The Ottawa route must undoubtedly share in the enormous through traffic to the coast & Atlantic states, which is growing with wonderful rapidity. Mr. Clarke estimates that grain can be carried from Chicago to Montreal via the Ottawa at  $2\frac{1}{4}$  c. a bushel. Provided the questions of feasibility & cost can be satisfactorily settled, the Ottawa waterway should be a success, & do for Ontario's 'New North' what the C.P.R. has done & is doing for the Northwest. It is a matter of provincial & national importance that the resources of that part of the Province which has contributed in the past so large a share of the provincial revenues should be developed. As to the feasibility of the project in question there seems no difficulty. If further steps are necessary to ascertain its cost these should be taken. If not too costly, the commerce created, the water-power utilized, the through traffic carried, & the general increase in land, timber & mineral values in the vicinity of the route should soon repay the outlay for construction of all necessary works."

#### Stikine River Navigation.

L. La Coste, engineer of the Public Works Department, who has been directing the movements of the snag boat Sampson on the Stikine River, says he found the Stikine a better navigable river than he had expected from report, & that the canyons are not as

difficult nor is the current as rapid as those of many mountain rivers. The sandbars are the worst phase of the navigation, since by virtue of the kind of soil these are constantly shifting. Dredging would be of no permanent use, & it is almost necessary for pilots to learn the channel fresh each year.

He states that one of the difficulties of the present season has been that the river boats, save in one or two instances, have not had sufficient power. All Stikine River vessels should develop 500 h.p. or 200 lbs. steam in order to make the up trip without lining. Coal must be burned instead of wood. With plenty of power, & a captain who has thorough knowledge of the river, there should be no difficulty in making the trip on schedule time, except during the spring freshet, when the driftwood coming rapidly through the canyon is dangerous. The current, Mr. Coste asserts, occasionally reaches 10 miles an hour, but the average is little over half that. The rise and fall of the river reaches as high as 16 ft. On May 26 the water rose 7 ft. in one night at Glenora.

The Sampson has cleared the snags from two of the worst bends in the river. The snag boat not having power to stem the current above the 75-mile canyon, a crew was forwarded in small boats with 500 lbs. of dynamite to blow out the snags further up the river. On the road down the men cut off all dead cottonwood trees upon the banks. These trees are in abundance in this region. They grow to good height and girth, but they are surface rooted, die quickly, & when dead fall under slight pressure, adding largely to the floating driftwood.

#### B.C. Freight & Shipping Report.

R. P. Rithet & Co. say, under date of June 30:—It is reported from San Francisco that no spot grain charter has been effected there for more than 2 months & in the north matters have been but little more lively. There has also been very little forward business & that too confined to northern ports. The war has indirectly given something of a fillip to coast freights in consequence of the U.S. Government withdrawing a number of steamers to act as transports. From the same cause a very animated demand has arisen for coal, both at San Francisco & the Hawaiian Islands, & the vessels in these trades are getting considerably higher rates. In the lumber market the tonnage offering is still limited, but the enquiry also is light, so that freights are steadied & changes during the month have been unimportant.

We quote freights as follows: GRAIN: San Francisco to Cork f. o. nominal; Portland to Cork f. o., 38s. 9d.; Tacoma to Cork f. o., 31s. 3d. LUMBER: British Columbia or Puget Sound to Sydney, 42s. 6d. to 45s.; Melbourne or Adelaide, 52s. 6d. to 55s.; Port Pirie, 50s.; Freemantle, 57s. 6d. to 60s.; Yokohama, 43s. 9d. to 45s.; Shanghai, 45s. to 50s.; Tientsin, 57s. 6d. to 60s.; Valparaiso f. o., 47s. 6d. to 50s.; U. K. or Continent, 65s. to 67s. 6d. Rates for lumber are more or less nominal owing to the scarcity of tonnage.

The Trade & Commerce Department is informed that the present season's shipping totals are the highest in Canada's history. The Montreal liners are all busy, both in the passenger & freight lines; & at St. John, N. B., & Halifax the summer trade is very heavy. From the Maritime ports this is especially true of the West India trade. Shipments have been so heavy to the West Indies this season that a new boat had to be put on a short time ago, in addition to the regular fortnightly service. The consignments of flour have assumed unprecedented proportions, & it is evident Canadians can capture that trade with a chance of retaining it.