

ft. of water, & stuck last season. Flat-bottom boats, 165 ft. long & 36 1-2 wide, drawing 21 ins. when loaded, & made of wood, are supposed to be the most practicable for the river. A boat of this kind will carry 200 passengers & 300 tons of freight. It can be placed on land in the winter & used for an hotel. The bare hull, covered so that it will float with either side up, is towed by an ocean steamer from Seattle to St. Michael's, & the machinery is shipped as freight. One ocean steamer can tow 2 of these hulls. The expenses of running the boats are high. River captains on the Yukon command a salary of \$250 a month, & they are paid that the year round on contract, although the season of navigation commences about June 20 & closes about October 15 or 20. Pursers are paid \$200 a month on a year's contract, & pilots get \$175 a month. A river steamer can make only 2 round trips from St. Michael's to Dawson City in one open season. Many have tried to make 3, but were generally stuck in the ice on the latter half of the trip. Mr. Turner does not see how the thousands of people who will be carried to St. Michael's in the ocean steamers will find their passage up the river to Dawson City. One ocean steamer carries 500 to 800 passengers, while a river steamer on the Yukon can, as a rule, carry only some 200.

The Sintram is being sent north from San Francisco to St. Michael's, the first of several new steamers for the Yukon. The old whaler, Lew Williams, has also joined the river fleet. Capt. Armstrong & Mr. Barber are putting on the Yukon a boat of about 126 tons. Having sold their old steamer to the eager miners, the Jesuit Fathers of San Francisco are having a new steamer, 92 by 22 ft., built to run between their Yukon mission stations.

Moran Bros. Co., Seattle, Wash., write THE RAILWAY & SHIPPING WORLD that in addition to the torpedo boat Rowan, which is nearing completion for the U. S. Navy, it has under construction in its yards at Seattle 17 river steamers & 25 barges. Of the steamers 14 are being built for the Yukon Co., the other 3 being for the Seattle & Yukon Steamship Co. The steamers for the Yukon Co. consist of 6 vessels 260 ft. long & 50 ft. beam, six 175 ft. long & 35 ft. beam, & two 100 ft. long & 22 ft. beam, all of the stern-wheel light draught type. The first 12 are designed & fully equipped for passenger & freight service. They are to have 3 decks, with the best cabin accommodations. Two steamers building for the Yukon Co. are tow boats for river & coast service. The river barges are also being built for the Yukon Co. They are to be 30 by 120 ft. with flat bottom. They are intended to carry a deck cargo only & are to have a freight house on deck. These steamers & barges are for service on the Yukon River, & are to be delivered at the time navigation opens on the river the coming season. Their approximate value is \$1,000,000. The vessels under construction for the Seattle & Yukon Steamship Co. consist of 2 steamers designed & equipped for passenger & freight service, 190 ft. long & 32 ft. beam, & a tow boat 100 ft. long & 22 ft. beam, all of the stern-wheel, light draught type. The approximate value of these is \$100,000 & they are also to be in service during the coming season on the Yukon River. The machinery for all these steamers was designed by Moran Bros. Co. & is being built by it in its shops at Seattle. Each steamer is to be equipped with a complete electric light plant. Moran Bros. Co. also operates a ship yard at Dutch Harbor, Unalaska, where it has under construction 2 passenger river steamers, 190 ft. long & 32 ft. beam, & 1 river tow boat 120 ft. long & 26 ft. beam, all of the stern-wheel type. A fourth steamer is being constructed there by it, which is 140 ft. long & 28 ft. beam. The hull for this vessel is of steel & was purchased in Toledo, Ohio, & shipped

west in sections. It is being reconstructed with new house & cabin, fully equipped for passenger & freight service. Several river barges are also being constructed at this yard. All the vessels being built at Dutch Harbor are to be delivered in the early spring to the North American Transportation & Trading Co., for whom Moran Bros. Co. has already constructed several steamers now doing satisfactory service.

The Polson Iron Works, Toronto, is building for the Yukon & Klondike Pioneers Co., for the Stewart River, a tributary of the Yukon, a flat-bottomed, stern-wheel steamer, 58 ft. long & 10 ft. beam, which when light will draw about 12 ins. of water & will have a speed of 12 miles an hour.

Through the courtesy of Passenger Traffic Manager McNicoll of the C.P.R., we are able to give at the back of this issue a copy of his Co.'s excellent map showing its routes to the Yukon gold fields, which will be found valuable to refer to while reading this article.

Richelieu & Ontario Navigation Co.

Senator Forget, the President, presided at the annual meeting in Montreal, February 6. The report stated the gross receipts for the year were \$688,026.09, operating expenses \$552,950.94, fixed charges \$26,945.09, & the net profit \$108,130.06. Two semi-annual dividends of 3 per cent. each amounting together to \$81,000 were paid, leaving \$27,130.06 to be carried to surplus.

Notwithstanding some unfavorable circumstances, such as cold weather during most of the spring & part of the summer, & the laying up of one of the Western steamers in the middle of the season on account of smallpox, the earnings show a gratifying increase over the previous year both in the gross & net results.

Carrying out the intention of this & previous boards of paying off the Co.'s floating liabilities, a sale of \$150,000 of stock was made at par on Nov. 2 last. As a result of this sale & of the general operations for the year, the statement shows \$15,280.17 cash on hand, as against a floating debt of \$188,989.34 on Dec. 31, 1896.

In conformity with the deed of trust, 38 bonds of £100 sterling each, amounting to \$18,493.32 have been withdrawn & cancelled, making a total to date of \$36,013.32. The Co.'s hotel at Tadousac has continued to show satisfactory results, & in consequence of its inability to accommodate the visitors offering, an enlargement of the building was made during last autumn by which its capacity has been increased over one-half.

With the view of meeting the want for larger steamers on the line between Toronto & Montreal, the directors, in Nov. last, entered into a contract for a modern first-class passenger steamer, 277 feet in length, to be ready for the ensuing season, & at the same time made arrangements for the necessary capital for her construction by the sale of 2,400 shares of stock at par. It is the intention to build another steamer of similar class for the same route to be ready for the season of 1899.

Following is the financial statement:—

ASSETS.	
Steamers, real estate, buildings, wharves, &c.....	\$2,165,709.69
Coal, stores, provisions, &c.....	82,306.82
Accounts receivable.....	60,785.42
Cash in bank.....	15,280.17
	<u>\$2,324,082.10</u>
LIABILITIES.	
Capital stock.....	\$1,500,000.00
Bonds, 5 p.c. sterling \$571,833.33	
Less cancelled.....	\$36,013.32
In treasury.....	12,653.34
	<u>48,666.66</u>
	<u>\$23,166.67</u>

Accounts payable.....	68,142.99
Unclaimed dividends.....	783.00
Accrued interest on bonds.....	8,930.32
Surplus.....	223,059.12
	<u>\$2,324,082.10</u>

INCOME ACCOUNT.

ASSETS.	
Dividend 6 per cent.	
Paid May 2, 1897..	\$40,500.00
Dividend 6 per cent.	
Paid Nov. 2, 1897..	40,500.00
	<u>\$81,000.00</u>
Carried to surplus December 31, 1897.....	27,130.06
	<u>\$108,130.06</u>

LIABILITIES.

Net income over & above expenses, fixed charges & interest, for year ended December 31, 1897.....	\$108,130.06
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The report having been unanimously adopted, the following were elected directors: Hon. L. J. Forget, W. Wainwright, F. C. Henshaw, Hector MacKenzie, E. B. Garneau, C. O. Paradis, Jas. Swift, Jos. Lewis, J. K. Osborne, R. Forget & W. Hanson. This is the same board as last year with the addition of J. K. Osborne, of Toronto. At a directors' meeting held afterwards, Senator Forget was re-elected President, & W. Wainwright, Vice-President.

THE NEW STEAMBOAT.

Following is a description of the steamboat Toronto, now being built, and which is to be completed this season to run between Toronto and Prescott:—Length over all, 277 ft.; breadth of hull, 36 ft.; breadth over guards, 62 ft.; depth of hull, 14 ft.; draft of water, 8 ft. 6 in.

The hull will be of open hearth steel with 4 water-tight bulk-heads. It will have considerable dead rise on the bottom with sharp lines forward and aft, permitting easy propulsion. The general shape of the hull under water is based on experience gained with the Niagara Navigation Co.'s steamboat Corona, of Toronto, which is considered a decided success, both in regard to economy and speed.

The engines will be inclined triple expansion with 3 cranks and 3 cylinders, respectively 28, 40 and 74 in. in diameter and 6 ft. stroke, each built for a working pressure of 175 lbs. of steam per square in., and for a speed up to 40 revolutions, with feathering paddle wheels 22 ft. in diameter, with curved steel buckets.

The boilers will be 4 in number, of Scotch pattern, 11 ft. in diameter and 11 ft. 6 in. long. Each boiler will have 2 furnaces of Adamson type, 40 in. in diameter, fitted with the Howden system of hot draft.

The general outfit, including anchors, chains, windlasses, steam capstans, fire & life-saving apparatus, water-tanks for trimming purposes, steam steering gear, steam heating, waterworks & artificial ventilation plant, & electric light plant for 700 lights, will be of the latest & most approved designs.

The passenger accommodation will be of the same general description & ornamentation as that of the steamers of the New York & Fall River Line, & more especially that of the steamboat Plymouth, with 2 tiers of staterooms in the upper saloon & a capacity for sleeping 400 passengers, in addition to crew, & with the dining-room on the highest deck forward.

The average time-table speed will be 17 miles an hour, with a capacity for 20 miles when required, which will permit of more convenient hours of sailing being arranged for than at present.

J. F. Wardner, the founder of Wardner in East Kootenay, B.C., will probably engage in the Yukon transportation business.