

**Interior of the St. Clair Tunnel.** In the illustration on pg. 13, of a flash light photograph showing the interior of this tunnel, it will be noticed there are two slight white marks, which look like apertures, at the far end. These, however, are not at the far end of the tunnel. The flash light photograph was taken from the mouth of the tunnel & looking down the first grade, & what appear to be two apertures are the lights which are stationed at the bottom of the grade & which were some 1,100 ft. away from the car from which the photograph was taken. The first portion of the tunnel on either side is a down grade, & between the two grades is a level stretch in the centre of the tunnel about 1,000 ft. in length. At the bottom of both the down grades are stationed two lights, one on each side of the track.

W. R. Baker, General Manager of the Manitoba & Northwestern Ry., is going to England for a three months trip, accompanied by Mrs. Baker.

### SHIPPING MATTERS.

#### The Montreal Elevator Syndicate.

The agreement between the Montreal Harbor Commissioners & the Conners Syndicate, as detailed in our last issue, pg. 363, was subjected to a few changes, the principal ones being, that the syndicate, with the approval of the Harbor Board, should have the power to vary the proportion of elevators & warehouses on the piers at Windmill Point Basin to the requirements of the traffic, & that the commissioners should not be entitled to assume possession of the property & business of the Syndicate upon giving a year's notice unless it failed to carry out its agreement. These alterations were fully considered & accepted in principle by the Board, & the Dominion Government has approved of the agreement.

C. I. de Sola, Montreal, informs us that he will supply a number of steamships & barges for the Syndicate. The exact number will depend upon circumstances, but he expects to supply about 15. He has already undertaken to have 4 powerful screw steamers & 4 barges ready during next summer & fall, & a number more for next year, & so on until the whole fleet is built. The steamers will be about 245 ft. long, & 43 ft. beam, with a draft of 14 ft. The engines will be of the most modern & most powerful type, capable of driving the vessels 14 miles an hour, & of towing with ease 2 fully loaded barges or more if necessary. The steamers will each have a carrying capacity of about 80,000 bush. of grain. The barges will be very similar to the steamships in dimensions, & will each have a carrying capacity of about 100,000 bush. of grain, so that a steamer & 2 barges, which will make the usual tow, will carry about 280,000 bush. of grain each trip. Mr. de Sola says it is probable that by the time the programme has been completed \$2,000,000 will have been spent in vessels. He is associated with the English firm of Swan & Hunter, Ltd., & with the Cockerill Works, one of the largest steel concerns in Continental Europe. It is his intention to have as much of the work done in Canada as possible, & everything will be done to extend the works in this country as rapidly as circumstances will permit. He anticipates that the Conners Syndicate will result in his carrying out his long cherished hope of creating a large ship building trade in Canada on the most up-to-date basis. He has been aiming at this for a number of years, & believes that the erection of the Conners elevator at Montreal will give rise to a trade between the lake ports & Montreal which will create such a demand for steamers as will justify the establishment of additional ship building works in Canada. It is probable that some of the steamers & barges required will be built in Toronto.

#### Via French River to Montreal.

On page 6 is a reference to an Ottawa rumor about the C.P.R. contemplating the improvement of the navigation of the French River, & the construction of a grain elevator at North Bay. It is now announced that the improvement of the navigation in question is seriously contemplated by the Dominion Government, the Minister of Public Works having recently made the following statement: "I have been giving my attention to this matter for several months, so much so that I will ask my colleagues to allow me to place in the estimates a pretty large amount of money to improve the French River from its mouth on Georgian Bay to Lake Nipissing. The distance is about 50 miles. It is already a navigable river, & we will only have to improve parts of it to make it a first-class waterway for ships drawing 18 ft. We will require to build dams & a couple of locks, & the balance of the work will be dredging. Just look at the facts. Up to this day the C.P.R. has carried our Canadian wheat to Fort William, where it has been left to its fate, or, in other words, has been taken by U.S. barges to Buffalo. Out of 10 bush. of Canadian grain I do not think I am exaggerating in saying that 9 have gone to U.S. ports. All that will be changed by the project we have now in hand. The distance from Fort William to North Bay is 659 miles. From North Bay to Montreal it is 360 miles. The C.P.R. will undertake to carry with a fleet of its own our Canadian grain from Fort William to North Bay, where it will be transhipped to C.P. cars, en route to Montreal. In other words, the C.P.R. will do what the Canada Atlantic Ry. is now doing from Depot Harbor. If this enterprise is carried out, as I have no doubt it will be, it will bring 25,000,000 or 30,000,000 bush. of Canadian grain to the St. Lawrence route & to Montreal. Of course, the port of Montreal has to be equipped speedily, & that is the reason why I have been urging so strongly on the Harbor Commissioners to go ahead.

"The Government certainly intends to have the works at Montreal gone on with. I am now in communication with the Harbor Commissioners. There is now \$500,000 in the estimates of my Department for carrying out works in the eastern portion of the harbor, where the C.P.R. will locate itself more & more. You will understand that there must be considerable improvements at the port of Montreal, but it must also be borne in mind that it is not a Montreal question, but interests nearly everybody in the Dominion, farmers, merchants, manufacturers, & in a word, all who use transportation."

#### Marine Work in Toronto.

The following work is in hand at the Polson Iron Works, Toronto:—

For the C.P.R. Co., a machinery outfit for a tug boat for Kootenay Lake, consisting of a fore & aft compound, jet condensing, marine engine, with cylinders 14 ins. & 30 ins. by 20 ins. stroke, having Clyde boiler 11 ft. diam. by 12 ft. long, both built to pass Government inspection for a safe working pressure of 150 lbs.

For the Kootenay Ry. & Navigation Co., an outfit for a stern wheel steamer, consisting of 1 pair stern wheel engines, cylinders 20 ins. diam. by 84 ins. stroke, & 1 locomotive fire box boiler, 80 ins. diam. by 28 ft. long, all built to pass Government inspection for a safe working pressure of 175 lbs.

For Roderick Smith, of West Selkirk, Man., a marine outfit, consisting of one 10 in. by 12 in. vertical engine, with suitable Clyde boiler, all built to pass Government inspection for a safe working pressure of 150 lbs. This outfit is intended for a tug & passenger boat.

For McKeen & Johnston, New Westminster, B.C., a marine outfit for a tug boat, consisting of a fore & aft compound, surface condensing engine, with cylinders 8 ins. by 18 ins. by 12 ins. stroke, & 1 Clyde boiler 84 ins. by 96 ins. long, both built to pass Government inspection for a safe working pressure of 150 lbs.

For T. W. Patterson, of Victoria, B.C., a marine outfit, consisting of a fore & aft compound, surface condensing engine, with cylinders 10 ins. & 22 ins. by 16 ins. stroke, & 1 Clyde boiler 7 ft. 6 ins. by 10 ft. long, both built to pass Government inspection for a safe working pressure of 150 lbs.

Particulars of the work being done in the shipyard of the Polson Iron Works are given on pg. 25.

#### Toronto Wharf Improvements.

Plans have been prepared for the erection of a wharf, freight & baggage sheds, offices & waiting rooms for the Richelieu & Ontario Navigation Co. & the Hamilton Steamboat Co. The laying of the cribwork has been commenced. The new structure will be known as the Richelieu wharf. It will extend into the bay 357 ft. from the foot of Scott st., & will occupy 54 ft. of the slip between Milloy's wharf & the Toronto Electric Light Co.'s wharf. It will support a shed 264 x 24 ft., divided into two sections—a freight shed, offices, waiting room, ladies' toilet room & passage way for the Hamilton Steamboat Co., & likewise waiting rooms, conveniences, etc., somewhat larger, for the R. & O. N. Co.

On the west side of the new wharf there will be a slip 124 ft. wide, & on the east side one 114 ft. wide. The berth of the str. Toronto will be on the east side & for the Hamilton steamers on the west. The driveway & walk will be quite spacious, & one feature that will be appreciated by passengers will be the walk, separated by posts, to protect pedestrians from vehicles, while walking from the boats to the Esplanade. The freight offices of the R. & O. N. Co. will be the same as at present. The work is to be completed by April 1. The cost is estimated at \$22,000.

W. & R. Freeland, the owners of the property, say that the old & somewhat unsightly coal sheds that stand to the east of the Yonge st. wharf are to be torn down & others erected & that negotiations are pending with the C.P. R. for the erection of an elevator upon the same site.

The Niagara Navigation Company purposes making general alterations & improvements to its present quarters at the Yonge st. wharf.

By the time navigation reopens in the spring the wharves at the foot of Yonge & Scott sts. should have a decidedly improved appearance.

#### Sault Ste. Marie Canal Traffic.

Not even the vessel owners of the lakes themselves realize the full meaning of the announcement that 25,250,000 tons of freight passed to & from Lake Superior through the canals at Ste. Marie (Canadian & U.S.) during the season of 1899. This, says the Marine Review, is just 4 times as much freight as passed the Sault in 1884, 12 years ago. In 5 years the freight tonnage has been almost doubled, as the figures for 1894 were 13,195,850 tons. The wonderful growth of traffic in this waterway is best shown by the following table giving the number of tons of freight moved & the registered tonnage of vessels for 12 years past:

	Total freight, net tons.	Registered Tonnage of vessels.
1899.....	25,255,810	21,658,347
1898.....	21,234,664	18,622,754
1897.....	18,982,755	17,619,933
1896.....	16,239,061	17,240,418
1895.....	15,062,880	16,806,781
1894.....	13,195,850	13,110,366
1893.....	10,796,572	8,949,754