

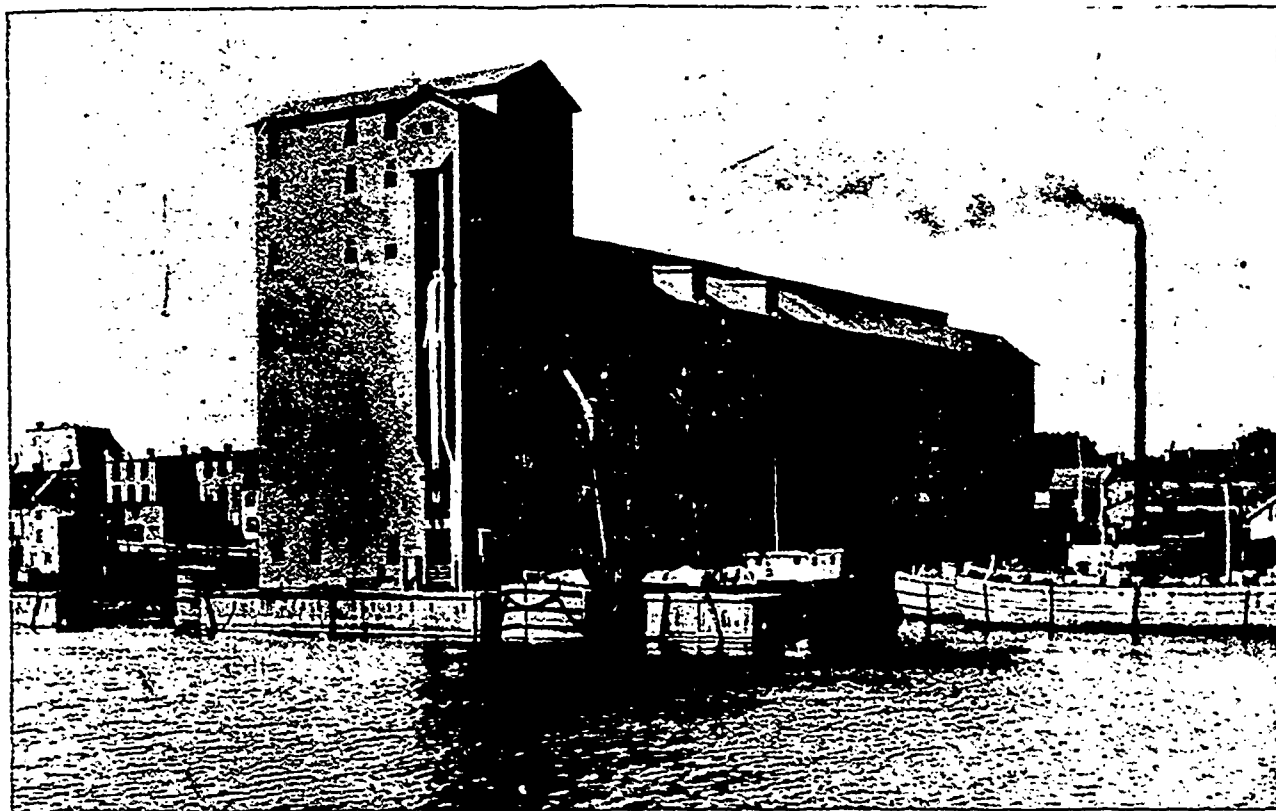
The Prescott Elevator

The city of Prescott, Ontario, is located at the extreme limit of the deep water navigation on the St. Lawrence, from the lake end of that magnificent stream. It is thus an important point in the water route of grain from the west seeking export via Montreal and American Atlantic ports. In order to handle the grain taking this route, the elevator shown in the fine picture above was built in 1895 for the Prescott Elevator Company, Ltd., by J. A. Jamieson, engineer and contractor and superintendent of elevators for the Canadian Pacific railway. During the season of navigation the house is used chiefly for the transshipment of grain from lake steamers to the barges which navigate the 9-foot channel between Prescott and Montreal, a distance of 110 miles, 43 of

capacity of 12,500 bushels per hour. It is contained in the marine leg tower attached to the front of the elevator, which also contains the winches and machinery for operating the leg, as well as the power shovel machinery. The marine leg discharges into the elevator into either of the two inside legs, each of which has a capacity of 15,000 bushels per hour, whence the grain is elevated to the scales, where it is weighed and distributed. The loftier legs discharge into twin series of 30,000 pounds capacity each, to the hoppers of which are attached revolving spouts. These revolving spouts are counterweighed, so that the weighman, simply by turning a handwheel, can distribute the grain to any of the high storage bins, or to the conveyors, without leaving his scales. The height of the tower, or cupola, is 132 feet from the top of the cap stones. The storage portion of the elevator

tion to these, there are two car shipping bins, fitted with bifurcated spouts, one on either side of the elevator. A double track runs through the elevator on the land end, and grain can be loaded into cars at the rate of 20,000 bushels per hour.

Power is transmitted by means of a six-ropes drive, which runs under the side wharf from the power house out to the main line shaft in the basement under the tower, of which all the machinery in the elevator is run. The loftier legs are driven direct from the main line shaft by means of Jamieson's Independent Leg Drive, which does away with the necessity for line shafting above the bin floor. Rope transmission, with friction clutches for applying the power is used throughout. The power house, which is situated at the side of the elevator and distant therefrom sixty feet, is a brick building 40x50 feet in size. The power



BUILDING OF THE PRESCOTT ELEVATOR COMPANY, LTD., AT PRESCOTT, ONTARIO.

which is canal, the time occupied by barges in making the trip from Prescott to Montreal being 36 hours. The storage capacity of the house is also used at this season for storing export consignments pending the arrival of ocean space at Montreal. During the winter months, however, the elevator is used as a point for distributing grain to millers in the vicinity and for transshipping grain for export through New York City, Boston, Portland and St. John, New Brunswick.

The elevator is 72 feet wide by 280 feet long, and has a storage capacity of 1,000,000 bushels. It is built out into the river on pile foundations, surrounded by concrete piers and masonry. The depth of water at the front of the building is 20 feet, and at the sides, where barges are loaded, fourteen feet.

The marine leg, which is 45 feet long and hung on a boom, has a ca-

capacity of 12,500 bushels per hour. It consists of 90 bins each, 12x18 feet in size and 10 feet deep, with a capacity of 10,000 bushels. In addition to these there are 14 high storage bins under the cupola, with capacities ranging from 2,000 to 6,000 bushels each. On the bin floor, and over the bins, are two 36-inch conveyor belts, running the entire length of the elevator. Each has its own improved self-moving grain tripper, by means of which grain can be deposited into any bin desired. Corresponding belts are placed under the bins in the basement, discharging into traveling hoppers for collecting the grain for shipment. On each side of the elevator there are four shipping bins of 1,500 bushels capacity each, to which are attached swinging iron shipping spouts 70 feet long, for delivering grain to barges. These spouts are fitted with telescopic revolving ends, with turned up points, and will throw the grain into any part of the barge. In addi-

tion to these, there are two car shipping bins, fitted with bifurcated spouts, one on either side of the elevator. A double track runs through the elevator on the land end, and grain can be loaded into cars at the rate of 20,000 bushels per hour. Power is transmitted by means of a six-ropes drive, which runs under the side wharf from the power house out to the main line shaft in the basement under the tower, of which all the machinery in the elevator is run. The loftier legs are driven direct from the main line shaft by means of Jamieson's Independent Leg Drive, which does away with the necessity for line shafting above the bin floor. Rope transmission, with friction clutches for applying the power is used throughout. The power house, which is situated at the side of the elevator and distant therefrom sixty feet, is a brick building 40x50 feet in size. The power