

wharf, is an open iron roofed building, 75 x 396 feet, 27 feet high at the eaves, into which an elevated railway track runs the entire length. This serves to hold much of the refuse not required during the sawing season, and which is delivered on cars holding about two cords each and moved by steam motors. This refuse is used for fuel during the winter months to run the dry kilns and other departments, all of which pay or account therefor at a proper price.

THE OSWEGO YARD.

The property at Oswego, N. Y., consists of water frontages, docks and storage facilities, to which additions have been made as the growth of trade demanded. The growing business indicates the advantages of the location. Starting in 1880 with a trade amounting to \$159,242.85, it has done a business in fifteen years amounting to some \$6,000,000. In addition to the above an average of from 15,00,000 to 20,000,000 feet of lumber have annually been transhipped to Albany, N. Y. Since 1882 it has been under the management of Charles H. Bond, who has grown up in the lumber business.

THE CAMPBELLFORD SAW MILL

was located on the Trent river in 1886 for the purpose of manufacturing railway ties and the sawing of such logs other than pine as were found to be inclined to become water-logged when they reached that point, and thus save them from probable loss on the way down the river. It is newly equipped with machinery, and has ample facilities in the way of land. It is connected by railway direct to the mill, and is the headquarters for a part of the Trent river logging operations, under the management of Thomas Callaghan.

The company also have mills located at Lindsay for similar purposes, and are using the same class of material as that at Campbellford. At Gravenhurst they have also a mill with a capacity of about 7,000,000 feet per year.

THE TORONTO AGENCY

was established in 1881 for the purpose of purchasing lumber and forest products on the lines of railway tributary thereto, and on the north shore of the Georgian Bay and Lake Huron, to supply the requirements of the Oswego yard and the factory at Deseronto, which could be thus better met than by the company's mills alone. This point is also a center for the purchase of red oak, basswood, ash and red birch, which are found north and west from Toronto, the handling of which has become an important factor of the Oswego yard. A large city trade is also done from the office on Front street.

Mr. E. W. Rathbun was made general manager in 1862, when about 20 years of age, and has been its manager ever since.

Mr. Frederic S. Rathbun, secretary and treasurer, and acting manager in the absence of the manager, began in 1872.

Mr. E. Walter Rathbun is superintendent of the general outside work.

GILMOUR & COMPANY.

The above company have for many years conducted an extensive establishment at Trenton, manufacturing lumber, dimension timber, lath,

shingles, etc. They also have a complete wood-working establishment, from which is turned out a variety of work, such as sashes, doors, pickets, interior finishing woods, etc. The saw mill cuts annually about 40,000,000 feet of pine, and is furnished with three band saws and three large gangs, besides a complement of circular and other saws for cutting pickets, staves, barrel headings, and other articles. The mill is driven by steam engines, which furnish upwards of 1,500 horse power. The planing mill is located two miles from the saw mill. The company have recently erected a fine saw mill at Canoe Lake, in Algonquin Park, adjacent to their limits. A description of this mill was promised for this number, but had not been received at time of going to press. The Gilmour Company manufacture largely for the South American market, but lately have also been giving some attention to cutting deals for the British trade.

THE OTTAWA VALLEY.

EXTENSIVE OPERATIONS OF CANADIAN LUMBERMEN.

In writing of the lumber industry of the Ottawa valley we must necessarily include a portion of the province of Quebec, the territory em-

80,000 square miles. Various estimates have been made of the quantity of timber existing thereon, but the figures presented by the different experts are somewhat at variance.

According to the "Forest Wealth of Canada," prepared by Mr. Johnson, Dominion Statistician, the total product of the Upper Ottawa, which extends from the eastern watershed of the Ottawa river up to the head of Lake Temiscamingue, from 1826 to 1881, was as follows:

PROVINCES.	PIECES.		
	Square Pine.	Other Woods.	Pine Saw-logs.
Ontario	7,171,182	494,824	22,005,102
Quebec	3,955,176	20,138	19,507,159
Total	11,126,358	515,962	41,512,261

During fifty-six years an average of 199,600 pieces of square pine timber and of 741,300 pine saw-logs was taken out. For eleven years, from 1882 to 1892, the annual output of square white pine averaged 64,414 pieces, and pine saw logs 3,807,800 pieces.

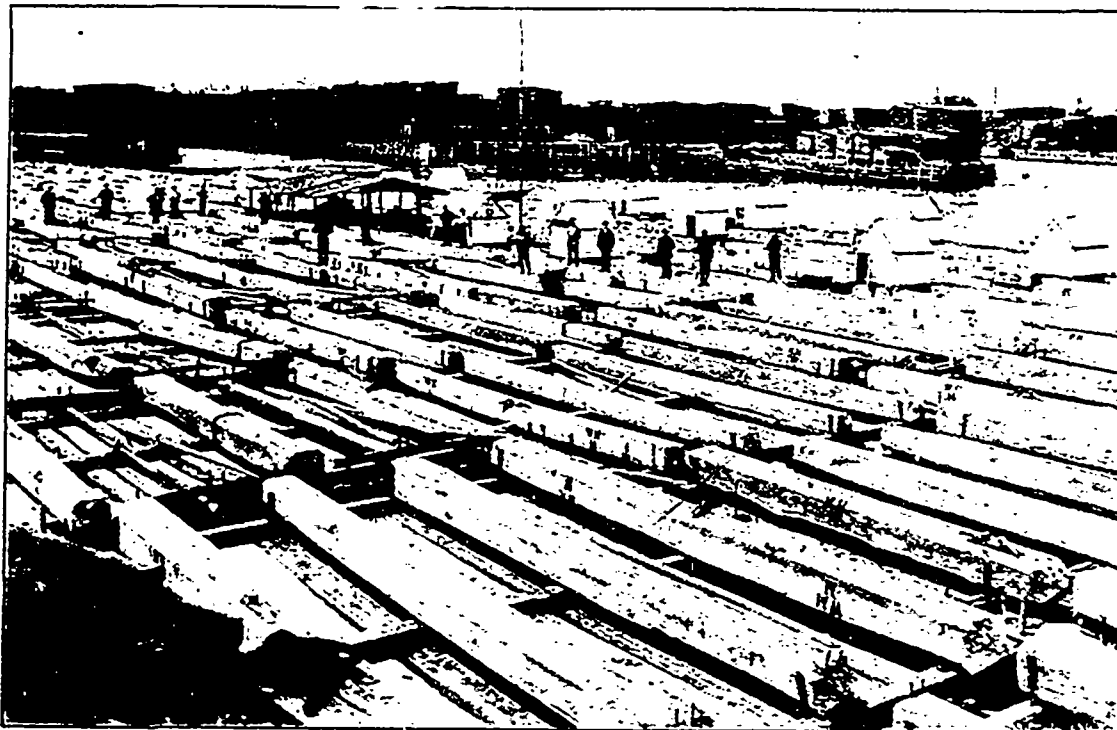
In the Lower Ottawa agency, from 1856 to 1881 crown dues were paid on 106,398 pieces of square white pine, 943 pieces of square red pine, 38,459 pieces of other woods, principally birch, 5,735,931 pieces pine saw logs, and 383,354 pieces spruce logs. Of square white pine, 95,155 pieces were cut in the first fifteen years and 11,243 pieces in the following ten years. In 1881 the cut of pine was 405,709 logs, and in 1891 451,538 logs.

In 1806 the first raft of square timber left the mouth of the Gatineau. From that time the business gradually increased, and during the years from 1850 to 1878 large quantities were rafted down the St. Lawrence to Quebec for shipment to Great Britain. But, as the above figures show, there has been a steady

decrease in the quantity of square timber manufactured since that date, while sawn or manufactured lumber has greatly increased, and the annual output for the past few years has been in the neighborhood of six hundred million feet. There is yet to be found in the Ottawa valley considerable quantities of pine suitable for square timber.

Of the forests of the valley, perhaps one-third have been denuded of their merchantable timber. This has been the result not only of the inroads of the lumberman, but also of forest fires.

Among the first large operators in the square timber business were the Gilmours, the late John Egan, the Macdonalds, Alex. Fraser, Wm. Mackey, the McLaughlins, Gillies & McLaren, the Caldwells, Thistle, Carswell & Co., Hardman Bros., A. & P. White, Klock Bros., the Poupores, Barnett & Mackie, and Alex. Barnett. Some of these have withdrawn entirely from the lumber business, while others are devoting their attention to sawn lumber. Still connected with the business are Messrs. Wm. Mackey, Alex. Fraser, Thos. Mackie, Alex. Barnett and Klock Bros. During the past summer only four rafts were taken down the river, while some years ago as many as two hundred found their way to Quebec for shipment. A view of a raft taken out by Mr. Mackey appears on this page, which



WM. MACKEY'S RAFT OF SQUARE TIMBER, OTTAWA, 1896.

braced being that adjacent to the Ottawa river and its tributaries on both sides, the Ottawa river being the dividing line between the two provinces for a considerable distance. The length of the Ottawa river from its outlet into the St. Lawrence, as far as explored, is in the neighborhood of 750 miles, although lumbering operations have as yet only extended a distance of about 375 miles above the city of Ottawa. On the north side of the river the principal tributaries which have afforded assistance to the lumberman in floating his logs to a point of manufacture are the Rouge, Nation, Lariviere, Gatineau, Coulonge, Black, Schyan, Du Moine, Bear, Magnacippi, Beauchene and Kippewa. To the south of the Ottawa, in the province of Ontario, are the Madawaska, Petite Nation, Rideau, Mississippi, Bonnechere, Indian, Petawawa, Mattawa, and Amable du Fond rivers.

The Ottawa valley, as is well known to lumbermen, possesses the greatest pine producing forests of Canada, the timber being both of the largest and best on the continent. It also produces large quantities of tamarack, ash, elm, white oak, birch, maple, etc., while recent discoveries have verified the belief that immense spruce forests exist in territories as yet unexplored. The area of the valley is perhaps about