## TIMBER OF CANADA.

INTERESTING ADDRESS BY HOR. J. K. WARD, OF MONTHEAL, QUE.

BEFORE the Natural History Society, of Montreal, a fortnight since, Hon. J. K. Ward, one of the veteran lumbermen of Canada, delivered an exceedingly instructive address. Business-like he launched into his subject as follows: "I do not purpose on this occasion to take up much of your time with preliminary remarks, other than to say that, having received my education, in the work shop and the woods, on the drive and in the saw mill, I will flatter myself that you will think with me that this is sufficient reason why I should not attempt to address the learned, but if I can succeed in imparting a few practical ideas in regard to economizing our supply of commercial timber, 1 will feel that my effort has not been in vain. My aim will be to speak only of what it has been my fortune to learn in the rough school of experience.

I will proceed with my paper on the lumber industry of the Dominion in the following order

First, the quantity of lumber manufactured, and the extent of territory on which it is made, and whence our future supply is to be derived.

Secondly, the importance of this trade in a commercial and economic point of view. Next, some points in its history, and a short notice of some of those men who have taken a prominent part in developing the trade.

The figures as to area and quantities are given approximately, as I consider it is extremely difficult to estimate the quantity of good timber on such a vast territory as Canada. I have never seen two lumbermen agree as to what a single limit of 50 miles contains. In my experience of 50 years. I have known men who could find nothing on a limit worth going after, while others have worked and done well on the same territory. There are about 6,000 sawnills in the Dominion, employing during the season of, say, 150 days, not less than 15,000 men in and around the mills, sawing, piling, shipping, etc. In the woods during winter, getting out the logs and tin, ber, and river driving, there are about the same number. Six thousand mills, averaging 400,000 ft. per season, wakes up the apparent output of all the mills. This quantity is sawed in a single day by some of the larger mills, while many of the smaller mills do not turn out 200,000 in the season. The difference in the apparent output of the mills -that is, 2,500 million-and that returnes as cut on public lands is made up as taken off private lands and the Crown Lands of Nova Scotia, of which we have no returns.

The area under license in the different provinces is about 100,000 square miles, yielding annually (1893) about 2,500 million feet b. m. of sawed lumber, pine and spruce principally, and hewn tumber divided as follows among the different provinces:

Ontario—7,140,000 logs, producing 728,000,000 feet b. m., principally pine; 40,000 pieces white and red pine, 42,000,000 feet b. m.; 133,000 pcs boom timber, 2,000,000 feet b. m.; average size of pine and spruce logs, 90 feet; ordinary revenue, \$939,000.00; ex bonus, \$958,000.00; area under license, 21,500 miles; area unoccupied, 17,000 miles.

Quebec—Area under license, 48,000 miles, producing spruce and pine logs, 6,170,000, equalling 683,000,000 feet b.m.; producing pine, spruce and birch timber, 18,500,000 feet b.m.; railroad ties and other wood, 22,500 pieces, 12,000,000 feet b.m.; pulp cedar, etc., 10,000 cords; revenue, \$892,000.

New Brunswick—Area under license, 6,000 miles, producing pine and sprace logs, 87,000,000 b.m.; hem-lock logs, 7,000,000 b.m.; cedar, 14,000,000 b.m.; tamarac, 1,400,000 b.m.; 14,700 cubic feet pine and hardwood timber, 176,400 b.m.; 12,000 boom sticks, 240,000 b.m.; revenue and bonus, 102,000.

British Columbia—Area under lease, 1,200 miles, producing \$0,000,000 b. in fir and cedar; 10,000,000 cedar shingles. The timber produced in British Columbia being so much larger than is found in the east requires a very different equipment to handle it than is used in this part of the country.

Manitoba and territories—Area under license, 2,200 miles, producing pine and spruce logs, 24,000,000 feet

b. m.; 10,000 railroad ties, 320,000 feet b. m.; 2,000,000 shingles; 5,000,000 laths; revenue, \$70,000.

Large as the foregoing is, it only forms one-quarter of the sawn lumber received in Great Britain, and onesixteenth of the timber, the great proportion being the product of the north of Europe and Southern States. While not an alarmist as to our supply of pine timber, I cannot but consider the wanton waste of it a sin, when so much good lumber has been and is being thrown away. A mistake is made by our mill men in not having more sawing capacity than the fast mills now in use possess, sawing, as they do, in 12 hours 40,000 or 50,000 feet with one circular saw. Too much haste is required to do this, when more money might be get out of the same logs, by employing two sets of saws, with the necessary trimming machinery, and doing the work with less speed. It does seem as if the lumbermen of the past, as well as many of the present day, entertained the idea that the supply of pine in Canada was inexhaustible and were anxious to get rid of it as quickly as possible.

With our vast amount of hardwood, which is fast coming into use, with the facilities of getting it to market, as well as the modern machinery for manipulating it, along with the great quantity of wood supply, said to be in British Columbia, all this, with the natural increase, it fire can be kept at bay, we can reasonably conclude that the end of our forest supply is a good way off. When that time comes I hope a substitute will be found.

The carrying trade and commerce is largely indebted to the forest. There is more tonnage employed on the St. Lawrence and canals in conveying lumber and timber to market than on any other commodity. Quebec was once the greatest timber and ship building port in the world. Forty years ago as many as forty to fifty ships were built in a single year. Now there is not one. In years gone by as many as 600 sailing ships visited the port in the spring and fall, taking away 300,000,000 feet b.m. of timber and lumber, as much as 18,000,000 cubic feet of square timber were shipped in a season. Last season about 3,000,000. Its once famous coves and wharves are deserted and falling to pieces, most of the pine deal business being done at Montreal that was formerly transacted at Quebec."

## SUGGESTIONS FOR FOREST PRESERVATION.

Mr. Ward emphasized the necessity of preserving the forests from fire, quoting at length from Hon. Peter White on the question. Continuing the lecturer said: "In selling lands to settlers, I would make it a condition of sale that 20 acres in every 100 should be given free and that it should be forever kent as woodland. To the uninitiated, travelling throug', the woods after the shantymen have taken all they think worth taking, he would hardly notice that the chopper had been there, except for seeing an occasional stump, a few chips, or a top of a tree, the great bulk of the timber remaining to hold back the water in its natural beds, and to prevent sudden rises and falls in the rivers, which oftentimes cause serious damage by overflowing the banks or becoming so low that they refuse to do the work they once performed with ease. To avoid these troubles and have our country remain well wooded for many years, it is but necessary to give the trees indigenous to it, leave to grow, and there will be no necessity to plant. I have no doubt but that much of the land that has been denuded of its timber would in a very few years be covered with a spontaneous growth of wood, and so prevent our country from becoming an arid waste, by utilizing only that portion of it which can be profitably worked.

To an inexperienced eye there may be hardly an evidence at first glance of the disappearance of the pine. The hardwoods with which the pine is interspersed are usually left standing to a considerable extent, and so are the smaller pine, so that even a well cut country will still lock splendidly wooded. No doubt the time will come when it will be carefully re-cropped. But the commercial value is largely gone, and with it the natural desirability, for the cutting of the pine greatly lessens the value of the woods as vast reservoirs, holding the snows in spring and the rains of summer, so as to feed steadily the innumerable streams of the water sheds. Consequently, spring floods and summer droughts for the cleared lands in the valleys follow close on the lumberman's axe. A cettain amount of attention has

been aroused by the rapid retirement of the pine. Some political action has been taken. Bad as the axe is, fire is worse. The Ontario Government has recently at tempted to enforce strict precautions against fire, and a has also appropriated as a provincial park an enormous reserve near Lake Nipissing, thirteen hundred square miles, of which nine hundred are pine timber, situated on one of the chief natural watersheds of the province But a great deal more than this is necessary of the Canadian pine forests are not soon to disappear like the tracts of Maine. We cannot urge too strongly on the government to set apart all lands not suitable for making a decent home for the settler. Much of the land that they are tempted to go on is not worth the trouble of clearing; it is only the presence of the lumberman, in many cases, that enables him to exist. The question of revenue is of importance, as well as other considerations in not destroying the forests and the country of its principal source of wealth.

The product of the forest is disposed of about as follows:

The first timber shipped to Europe from Canada was sent from Quebec to Larocelle by Talon in 1667. Leuk. Hocquart shipped timber and boards to Rochefort in 1735. In 1823, 300 cargoes were shipped from Quebec.

REMINISCENCES OF THE LUMBER TRADE.

In the early part of the present century the Montmorency mills were established by a Mr. Usborne. Mr. Peter Patterson, a ship curpenter by trade, who had spent some time in Russia, became an employe of Mr. Usboirne's, and finally proprietor of the property, and became one of the largest manufacturers of lumber in Canada. Sir John Caldwell established mills at Rivieredu-Loup en Bas and at Etchemin. The late William Price, father of the Hon. J. Price, of Quebec, established large wills at Chicoutimi, St. Alexis, L'Anse-St. Jean, St. Etienne, Batiscan, Matane and many other places, leaving an immense business to his sons, which is now conducted by the son before named. The late Alian talmour, and relations of the same name, carried on for many years a large business on the North Nation, the Gatineau and Mississippi (Canada), and at Trenton, Ont, the younger branches of the family continuing the business.

Philomene Wright, one of the first lumbermen on the Ottawa river, came from Woburn, Mass., in the United States, arriving at the Chaudiere Falls-or the Asticou, as called by the Indians-as early as the year 1790. It was not till 1797 that he finally decided to make his home in Canada, and on the 20th of October 1799, he and two companions pitched upon the site of the future city of Hull. He finally quitted Woburn for Canada on the 2nd of February, 1800. He was accompanied by five families, and had in his train fourteen horses, eight oxen and seven sleighs. The first tree was felled on the site of the homestead on the 7th of March, of the same year. He brought the first square timber from the Ottawa to Quebec in the year 1807. He built the first slide on the Hull side of the river in 1829. He was elected the first member to represent the County of Ottawa in 1830. He died in 1839, and sleeps, an honored memory, in the little cemetery on the Aylmer road. Philomene Wright built his first saw and grist mills in 1808; they were, unfortunately, burned down, but were rebuilt in 60 days.

About eighteen years prior to this the first saw mill on the Ottawa had been built at Point Fortune, by a Mr. Story. It boasted one upright saw, and it is recorded that when the man in charge gigged back the carriage for a fresh cut, he would sit down on the log to take his dinner, and was about through by the time the cur was finished. With our present saws the same can be done in four seconds.

Among our successful lumbermen have been the late James McLaren, of Buckingham; Peter McLaren, of Perth; Bronson, Weston & Co., Perley & Patee, j. R. Booth, Alex. Fraser, of Westmeath; W. Mackey, and the late firm of Hamilton Bros., whose father was one of the first in the trade at Hawkesbury, Ont. Many others have taken an active part in the business, with more or less success.

West of the Rocky Mountains, Canada, contains vast