taking the lumber from the sawing floor to the sorting shed on the ground level.

The sorting shed is some 250 feet long arranged with sets of rollers on each side, the lumber being rolled in stocks upon lorries provided with swing tables and transferred to the yard by horses.

The yard (Fig. 3) is arranged with standard gauge tracksrunning atright angles with the mill and parallel with each other and spaced about one hundred feet apart. Rollers are also arranged between the piles, which are put up two deep from each track. With this arrangement of rollers the lorries are quickly unloaded and two men with one horse drawing two lorries load and unload between 50,000 and 60,000 feet per day on an average draw of nearly half a mile.

The shipping is done from the same tracks, empty cars being drawn from the siding which enters the rear end of the yard and placed opposite the piles required, and when loaded again drawn to the siding for the engine to take hold of. When the yard is finished there will be from ten to fifteen of these tracks, all connecting with the siding from the railroad at one end and the siding from the mill at the other.

The power plant consists of a solid brick power house, 70 feet x 80 feet, with an iron and steel grider roof, containing six boilers of 150 horse power each, suspended from heavy steel beams in batteries of two each, and arranged with Dutch ovens. The boilers and fittings complete were supplied by W. J. Campbell & Sons, of Ottawa. The engine is a heavy type Reynolds Corliss of 750 horse power, built by the Allis-Chalmers Company, of Milwaukee. Only four of the boilers are at present being used, the other two being for spares or for power in event of increasing the cutting capacity, there being room left for a pair of twins and a gate, or another band-mill, to be added.

The mill was built under the direction of Mr.

The head office of Fraser & Company is at 74 Nepean street, Ottawa.

## THE QUESTION OF A LUMBER DUTY. [CONTRIBUTED.]

Supply and demand are, as they have always been, factors paramount in regulating the prices of commodities, and, of course, lumber is a much sought after commodity and subject to the same great law.

Competition is a strong force in regulating prices, and may be said to be a subsidiary to supply, inasmuch as it works on and through supply. In times of prosperity competition is not felt so keenly, but when depressions come its every manifestation is felt by each of its parts in the same line of business.

The lumbermen of British Columbia are feeling this competition from their rivals on the American side, and are agitating to bring about redress of certain existing greivances. They are appealing to the Dominion Government for better legislation in the matter of duty, and the following remarks may help to show the justice of their contention.

During five months at the beginning of 1903, there was imported into Canada timber and manufactured lumber to the value of \$3,609,272, of which \$745,432 was dutiable and \$2,863,840 free of duty. Of the full amount imported over 96 per cent. came. from the United States, and of this 96 per cent. 80 per cent. was free and the rest dutiable, or for every dollar's value imported therefrom on which we collected revenue, there was \$4.36 on which we collected no revenue, and not only did over 96 per cent. of all the imports come from the United States, but 78 per cent. of the total amount came on the free list from them. Of this amount on the free list, about 92 per cent. consisted of timber, planks and boards.

The Eastern States depend largely for their supplies of spruce, pine, hemlock, etc., on Ontario, Quebec and New Brunswick, and

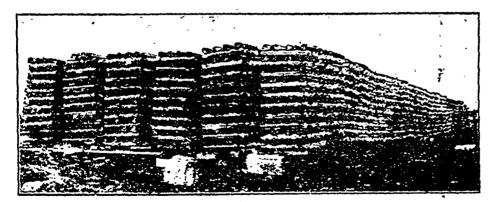


FIG. 4.-LATH PILED IN VARD.

Charles Proper, the well known millwright of Ottawa, asisted in superintendence by Mr. J. A. Story, manager of Fraser & Company's sawn lumber department. Mr. Proper has built twenty-two mills in Canada and the United States, including the mills of J. R. Booth, Gilmour & Hughson and the Hull Lumber Company at Ottawa, McLachlan Bros. at Arnprior, and the James Maclaren Company at Buckingham. He is one of the most capable millwrights of the day, and the new mill of Fraser & Company is a splendid example of his skill. therefore those provinces will scarcely be buyers of such commodities (rom the States, and hence the bulk of the imports, especially in pine, spruce, cedar, fir, hemlock, etc., are taken into the prairie provinces of the Dominion and to a very large extent are the product of the Western American mills.

Again, these Western mills have an advantage over their Canadian competitors in that, not only are they protected by their own high tariff rates, but they have the same freight rates over their railroads to most places in the Canadian West as the Western Canadian

manufacturers, and besides they have the same access to Canadian markets as the Canadian himself for those lines which they find most difficulty in disposing of in their own country. The proportion of high grade lumber and rough is, generally speaking, about I to 3. Almost always there is a demand for the higher grades, while even in a good market persistent endeavor is necessary to dispose of all the coarser and rough grades.

There is a duty in the United States of \$1



FIG. 5.—LOAD OF 16-FOOT WHITE PINE SAW LOGS FROM FRASER & COMPANN'S CAMP ON THE COULONGE.

per M. feet B. M. on all timber not less than 8 inches square, of one cent. per cubic foot on boards, planks, deals and others of whitewood, sycamore and basswood; of \$1 per M. feet on any other N. O. P.; and \$2 per M. feet on rough lumber; on cedar boards, planks or deals 20 per cent. ad valorem; on boards, planks, deals or timbers when planed or fin ished, 50 cents per M. feet B. M. for each side dressed, and when two sides are dressed and tongued and grooved \$1.50 per M. feet B. M.

Now, as we do not ship whitewood, sycamore or basswood from British Columbia, we are subject to a 2 duty on any pine, hemlock, spruce or fir we may wish to send to the United States.

Furthermore, it is only by dressing our dimension stuff to a large extent that we reduce very materially the weight, and are enabled to reduce the cost of freight and so increase the duty. Heavy dimensions are all dressed on at least two sides, and this adds another dollar to the duty charges on shipping into the United States, making a handicap against us of \$3 per M. on these grades which we have to bear if we seek to enter American territory with our coarser grades.

And what are the conditions when the American enters our market? Why! he can bring in all his undressed lumber free of duty as well as his dimension stuff, and can even go to the length of dressing one side and still bring it in free. If two sides are dressed he pays then only 50 cents per M. feet duty

Taking, therefore, these points into consideration and reviewing the position as it is now, the British Columbia manufacturers are more than justified in their contention. The American has his own market entirely protected, where he can sell all his higher grade lines at a fair margin, which profit is good enough to allow him to dump his surplus rough grades into the Canadian market at a figure below the actual cost of production and other charges incurred

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