

WHAT IS WASTE IN LUMBER MANUFACTURING.

THIS is a pertinent question, in view of the oft-repeated assertion that our lumbermen are the most wasteful set of men in any industry. For years the cry has gone forth that the lumberman is wasting much of the forest product. The ordinary mind has come to accept this assertion as gospel truth, and most people actually believe that the average lumber manufacturer is outrageously wasteful and extravagant in his method of turning the greatest and noblest of natural products into a commercial article.

There is scarcely an instance of anyone disputing this commonly-received opinion, and it may be considered bold to do so at this late date. Nevertheless, the so-called fact is to a great extent no fact at all, but simply a mis-statement, or a misunderstanding of economic conditions.

Literally and strictly speaking, waste is that which is needlessly thrown away; that which might be saved by proper management.

A thing thrown away that could not have been saved except at an expense equalling its value after it had been saved is not really wasted when thrown away.

It is claimed that from 20 to 40 per cent. of the gross forest product goes into refuse in the process of manufacture, but to say that this 20 to 40 per cent. is wasted is a stretching of terms. In utilizing any natural product only so much of it will be turned into merchandise as can be sold above cost of manufacture. No business can or will continue long on a bare cost basis.

With this understanding, the only question that arises is, does the lumber manufacturer throw away anything which he can market? Or the question may go farther: Does he throw away anything that he could market at bare cost?

Much material, handled at a good deal of cost for labor, becomes mere refuse, and is thrown away. Every lumber manufacturer aims to sell every bit of product for which he can get back the bare cost of the labor he has been obliged to put into it in order to separate it from that part of the product from which his profit comes. The cost of labor expended on any portion thrown away must be added to the price of the merchantable part before there can be any profit in that. Hence, every bit of the product that can be sold for the cost of the labor put into it, adds that much to the average value of the profitable part of the product; and carrying this reasoning still farther, it follows that this latter part can be sold cheaper in proportion to the smallness of the amount thrown away as unsalable except at a loss.

NO AVAILABLE MARKET.

There is very little of the forest product that is not usable or salable. The only question is whether it can be used or sold so as to cover cost or make a profit in the handling. The lumberman's slabs and edgings are all salable, and all be eagerly bought if in the market; and every lumberman would be glad to sell them, instead of consigning them to his "hell"; but when a cord of white or yellow pine or maple slabs and edgings that actually costs, say \$3 a cord, to cut into lengths and load on cars at the mill, and \$3 a cord for freight, besides switching charges and cost of unloading, sells at \$6 a cord, carload lots, in some town like Chicago, St. Louis, or Milwaukee, it is nonsense to call the mill-man waste-

ful for running these slabs and edgings into the "hell," instead of shipping them to market.

If piling up and holding the sawmill refuse until such a time as a profitable market could be found were possible, then the question of waste might arise, but this is very seldom possible, for all mill refuse is exceedingly perishable and soon loses whatever value it might have had in the first place. It deteriorates much faster than market conditions ever improve.

But slabs and edgings are a small part of the refuse of lumbering. A large part never leaves the forest. Another large part is in broken bits, bark and the dust made by the saws. This latter substance is now much utilized in making steam where soft woods are manufactured, but with the hardwoods that is almost out of the question and the furnace fires are fed with the heavier refuse, such as slabs and edgings. To that extent in hardwood mills the slabs and edgings, and in pine mills the sawdust are of real value, and they to that extent ought to be deducted from the total of the refuse.

If lumbering could always be carried on close to towns, the question of what is waste and what is not would be greatly simplified; there would be almost no refuse, as nearly the entire forest product could be turned to merchantable account, at cost, anyhow; and to that extent the average cost of the more valuable product of the lumber would be lessened.

But in the nature of things that is impossible. The necessities of civilization, especially of the rushing, pushing, somewhat hurly burly civilization of the United States, has demanded the manufacture of lumber under conditions that absolutely forbid utilizing more than 60 to 80 per cent. of the forest product. To say that the other 20 to 40 per cent. has been wasted, is to dispute the necessity for those conditions, which is quite another thing.

WASTE WAS INEVITABLE.

Had the timber in the great forest states of the northwest been cut and utilized only under conditions that would have permitted the merchandising of practically all the forest product, where would the great empire of the central west be to-day, and what would be the condition of the great prairie states now teeming with millions of population, busy industries and happy homes. That there has been some waste in the destruction of the forest is beyond dispute. Occasionally this may be laid at the door of the lumbermen, who, in their haste to get rich, utilized only that part of the forest product which would yield large profits. But those instances have been rare, and were happily confined to a very few years as far as the great pine states have been concerned. Under present conditions there is really little actual waste. That is, little or none of the gross forest product is thrown away which can be sold even at cost, and as civilization with its wants and its small industries is crowding closer and closer around the sawmill, every year shows a great decrease in the amount of actual refuse or worthless product.

In the old eastern states there is little refuse, little of the forest bulk but that yields at least cost, and the percentage that pays a profit has grown very large there compared with the newer northwest. The time is not far distant when in all states where any lumbering will continue, there will be practically no forest material thrown

away except the bare twigs and leaves, and perhaps they too may, in the near future, be utilized to the extent at least of the cost of gathering them, either for fertilizers or for use in some chemical processes whereby valuable substances may be extracted at a profit.

There is undoubtedly at present a larger proportion of the southern forest going into refuse than elsewhere east of the Rocky mountains, and this results from conditions stated heretofore, such as want of market for anything but the regular products of lumbering, and the absence of a crowding population and small industries to utilize the refuse.

But even in the south there is an improvement in some respects, industries are making in that direction, and certain processes for the conversion of refuse into merchantable products are being introduced which bid fair to change the conditions greatly. What is waste under one condition is not under another. For instance, with corn high and coal cheap and within easy reach, it would be wasteful for the western farmer to burn his corn; but that question was reversed when the conditions were.

There is much the same condition in mining coal as in the manufacture of lumber. Around the great mines of Pennsylvania and Ohio there are doubtless millions of tons of coal dust that are practically refuse and worthless at present because not marketable under present conditions, even at cost. Still, the production of such refuse is a necessary concomitant of that business, and no one claims it is a waste to run that dust into ravines and out-of-the-way places, to lie there unused. Why not apply the same reasoning to the sawdust heaps and slab piles, or the refuse burners of the lumberman, and stop the everlasting hue and cry of the lumberman's extravagance and criminal waste?

The real waster of the forests of this country has been the settler, the farmer who has chopped down and burned upon the ground many times the amount of timber that all the lumbermen of the country have ever run into their refuse heaps. The settler or farmer has been a much more wanton destroyer of the forests than the most reckless lumberman ever known. O. S. Whitmore, in *The Tradesman*.

CORRESPONDENCE

Letters are invited from our readers on matters of practical and interesting to the lumber trades. To secure insertion all communications must be accompanied with name and address of writer, not necessarily for publication. The publisher will not hold himself responsible for opinions of correspondents.

ENQUIRY FOR BROOM HANDLES AND SKEWERS.

LONDON, ENG., June 15th, 1899.

Editor CANADA LUMBERMAN:

DEAR SIR, A London firm of importers asks me for names of Canadian producers of basswood handles, wood blocks of red pine for flooring and paving, and manufacturers of skewer (wooden). I have given several names, but should be pleased to hear from any firms who would like to be placed in communication with the house making the enquiry.

Another recent enquiry which might interest your readers is from a house in the Midlands claiming a large connection in the chair trade, who wish to hear from Canadian producers of chair parts cut out from birch and sawn to shapes ready for cutting up. The firm in question considers that there is an opening for just development in this line. Canada already does trade in chair parts, but there are probably houses which might like to take the matter up.

Any communication or information addressed to me will be placed before my correspondents.

Yours faithfully,

H. WATSON,
Curator Canadian Section, Imperial Institute.