

LUMBER AT PUBLIC AUCTION.

Time-honored customs and prejudices are features of a market which are difficult to successfully overcome, and when anything in the nature of an innovation is sprung upon the community it is very apt to create comment not always of a favorable nature. When it was first rumored that a lumber auction company was to be established in New York city the matter was looked upon as of no serious nature, and those who thought enough of it to express an opinion generally predicted it would prove a failure. When the announcement was made that a company had actually been organized, and a date was set for the first sale, curiosity became rampant, comment was heard on all sides, and on the day of the sale a motley crowd of dealers, commission men, manufacturers, and a few producers were attracted to the company's yard. It is not our object to comment upon the probable success or failure attending the venture. Auction sales of horses, tea, molasses, and other commodities are not uncommon, and across the big pond the regular auction sales of lumber in the leading markets are a prominent and successful feature of mercantile life. With this in view the inquiry is pertinent: Why cannot lumber be sold at auction in this country, and the results prove satisfactory?

The leading objection in New York city emanates from the commission dealers, who claim that consumers are brought in direct contact with the manufacturers, and consequently their business, and likewise that of their customers, is injured. Suppose, for the sake of argument, that we grant such a claim to be true, why is it that manufacturers, with the prestige of auction prices, as the term is generally used, consent to ship lumber to be sold in such a way? No doubt it will be claimed that the shippers are coerced by misrepresentation, and would never ship a second lot; others will say that shippers have an idea that, by being brought in direct contact with an open market, in which all users of lumber are placed on a common level, they will be able to obtain a better price for their lumber, and still others will say that no mill man will ever consign good lumber to be sold in that way. All such opinions are worthy of a certain amount of consideration, but the fact stares us in the face that since the New York company started we have heard reports of the intended formation of similar companies in several other of the larger cities, and we are inclined to think that possibly in the near future a radical change in the methods of conducting the lumber business will be brought about, should selling the product of the mills by auction prove a success.

The causes which have led to such radical departure are many, and it is not at all likely that the mill men and the eastern seller will ever view the situation from a common standpoint, as the former judge the situation wholly by the results of consignments, while the latter take the general surroundings and the good will of the trade into consideration, and having, in addition to that their own welfare and the possible interests of their principals at stake, they may sometimes make a costly mistake, which the shipper, having all the money interests in the matter, may be obliged to pay for. It will be interesting for lumber dealers generally to follow the progress of auction sales, as the gradual developments of the new business will be liable to suggest many valuable ideas that can be put to a practical test with profit.—*Northwestern Lumberman.*

ABOUT WATER-WHEELS.

Where are all the water-wheels? Everybody tells about his steam engine, how it bothered him, and how he fixed it, but we don't hear from a water-wheel once in two years.

They are not idle, even if they are not heard from; and the millwright, machinist, or M. E., who has to crawl into a wheel-pit on some December Sunday, makes noise enough to supply the deficiency.

The old overshot wheels have almost entirely disappeared, and peace be to their remains. They were awful good wheels to economize water, and awful poor wheels to keep in repair. They were the only wheels that gave good

results with a partial gate. Take the best turbine in the market, even one that develops 85 per cent. of the power of the water, and when you want to run one or two machines and save water by using a partial gate, then you get left right off. The 85 per cent. doesn't come along at half gate, and neither does the 50 per cent., and often 40 per cent. stays away with them.

There is just one way by which we can overcome this trouble and get good results from a little water with a turbine wheel. We must put in small wheels and connect to the machines to be driven. A few years since most M. E.'s got in the notion of connecting all the machinery in a mill to one big shaft, and then driving said shaft by one or two big water-wheels or steam-engines. The M. E.'s are afflicted with fashions just exactly as the ladies are, and we will admit that the former's fashions are much more costly.

When a new idea comes up, then everybody must use that idea for everything. He must ride the hobby to death before he finds out just what it is really good for, and after he has done a thing, seen it fail, and then reconstructed it according to common sense, then that chap knows what his fashionable idea was good for.

The one-water-wheel fashion was fast playing out, and the one-steam-engine idea is going out with it. Everybody will want a water-wheel or an engine for each separate machine in the future. It is probable that this division of motive-power will be carried to the same ridiculous extreme that the consolidation scheme attained, but for small and variable water-power this method is the best known to practice. When a man gets to figuring up the per cent. of his water-power which is actually converted into work, and finds the same way down to the lower edge of the twenties, then he is apt to get thinking about the hundred tons of 5", 6" and 7" shafting that he is driving day after day.

When something happens to his water-wheel, and his whole mill stands still two days for repairs, then he wishes that his three hundred horse-power water-wheel was broken up into ten smaller ones. He might have ten times as many breaks, but they would delay only one-tenth of his plant.

The steam-engine men have found it out too. We will not have another monstrous engine built to drive all the machinery of a centennial exhibition. Instead of one, there will be dozens of small ones employed to do the same work.

When a man buys a water-wheel, he should buy the best one in the market, and when he selects that one, then he has done a thing which we don't know how to do.

Just advertise for the best water-wheel made, and you are answered by 392 men, each and every one ready to take oath that their wheel is the one which you want. You are confronted with wheels that are almost too simple in their construction, while other wheels are so complex and complicated that the water must be filtered, and almost needs steaming and bending, to enable it to get through the intricate passages.

Wheels with scroll cases are shown you and they are good ones, generally speaking, but the man who sells another kind of a wheel says the scroll-case wheel "will wear its step down stream." It will too, if it is not balanced, and put up true upon a straight shaft. Perhaps Tom turned the shaft too small, or bored the wheel a trifle large, then the wheels will not run true. Perhaps he sprung the shaft when he keyed on the wheel. This made a crank of the water-wheel shaft, and the up-stream side of that step has to stand the music.

When this crank business occurs in a wheel which takes water through chutes all around its circumference, then the step must go just as surely, but it goes from all sides at once, and wears out very much faster than with the scroll case.

Sometimes a wheel is set in a decked flume, and then condemned because it doesn't come up to the expectations of the purchaser. More than once this has happened, and the trouble has all been found in the flume. The shaft passed out through a stuffing box which was bolted firmly to the deck timbers and planking. The wheel didn't give 50 per cent. of the power

expected. An investigation disclosed the fact that one corner of the flume settled when it was filled with water, and the shaft was drawn out of line 2½" thereby.

We don't want any of our water-wheels placed in a 4'x6' box. We want them where we can get them when they need repairs. Give us a water wheel in a nice cast-iron case outside of the flume, and then it can be overhauled without much trouble.

The old frame flume is a thing of the past. We will have none of it. It takes up lots of room, and when it gets to leaking, it is worse than ten leaky roofs. Give us an old boiler for a penstock. That is what all old boilers are fit for, with one exception, and that exception is to use the boilers for piers under buildings or bridges.

Patch up an old boiler so it will be water-tight, then place it on end in position under building or bridge. Now go to work and fill with cobble-stones, brick-bats, or any stone that will go into it. Pour in thin cement as you fill up. When the concern gets solid you will, if it is properly anchored top and bottom, have a pier which will stand much trouble. Fifty or sixty feet can be easily covered by uniting together a number of old shells not less than 48 inches in diameter.

These old shells make splendid penstocks; they are pretty safe there for they seldom are troubled with low water when used for this purpose, and the fireman never gets a shadow of an excuse to swear he had two gauges of water when the plates "melted" out.

A technical journal illustrated recently this use for old boilers, but one-half the things possible in this line have not been told. Keep the flume out of the mill. Run the old boiler to the canal or river and do away with the nasty rotten homely flumes.—*J. F. Hobart in American Machinist.*

STEAM BOILERS.

In our contact with engineers, users of steam, and dealers in steam goods, we have often heard very positive preference expressed for one or another form of engine or boiler. Some would swear by a horizontal return tubular, others would have nothing but a fire-box boiler of the locomotive type, while others, comparatively few but as a class quite numerous, preferred the vertical tubular. Some have tied up "for keeps" to a water tube boiler, others will hear of nothing but a fire tube; some prefer the tubes numerous and small, others are contented with a smaller number, but must have them larger; some will have a boiler fired internally, some externally, and some even advocate removing the furnace from all contact with the boiler.

When we are questioned as to our preference in the boiler line we always require to know how, where, and for what the boiler is to be used. A boiler which will furnish steam with the least expense for fuel and repairs in a New England cotton mill might be the most inconvenient and expensive that could be used in a portion of the country less favored as to water. A boiler which would furnish admirably the low

pressure and quantity of steam required for heating purposes might be entirely at a loss under the higher pressure, and the more intense combustion requisite as a source of power. The locomotive power is particularly adapted to its special work. It gives us the maximum of power in the smallest space and with the lightest weight, yet it would hardly be the most economical boiler, all things considered, for most stationary plants. When a man talks one boiler straight, through thick and thin, for all purpose, and in all conditions, it is safe to conclude either that he has an interest in that boiler or does not know what he is talking about.—*Boston Journal of Commerce.*

BOARD OF TRADE RETURNS.

The following are the returns issued by the Board of Trade, for the month of Sept. 1885, and also for the 8 months ending Sept., 1885:

MONTH ENDED 30TH SEPT. 1885.

Timber (Hewn).	Quantity.	Value.
	Loads.	£.
Russia	38,822	65,605
Sweden and Norway	43,688	62,959
Germany	21,686	56,215
United States	7,658	26,734
British India	3,304	43,876
British North America	61,094	274,965
Other Countries	36,149	54,191
Total	212,901	684,618

Timber (Sawn or Split, Planed or Dressed).	Quantity.	Value.
	Loads.	£.
Russia	194,731	461,009
Sweden and Norway	191,525	401,700
British North America	230,975	546,894
Other Countries	32,853	94,177
Total	650,044	1,492,780

Staves, (all sizes)	14,332	53,427
Mahogany (tons)	3,119	60,312
Total of Hewn and Sawn	862,345	2,077,392

NINE MONTHS ENDED SEPT. 30TH 1885.

Timber (Hewn).	Quantity.	Value.
	Loads.	£.
Russia	207,054	372,156
Sweden and Norway	419,001	538,095
Germany	245,404	567,777
United States	120,675	403,939
British India	28,019	287,962
British North America	188,254	830,602
Other Countries	312,147	443,273
Total	1,521,145	3,593,804

Timber (Sawn or Split, Planed or Dressed).	Quantity.	Value.
	Loads.	£.
Russia	842,760	1,817,484
Sweden and Norway	1,317,787	2,773,644
British North America	663,798	1,674,846
Other Countries	277,968	826,119
Total	3,122,273	7,092,093

Staves (all sizes)	90,345	376,312
Mahogany (tons)	45,671	400,076
Total of Hewn and Sawn	4,613,418	10,683,897

THE prospects for the lumbering camps in the Lake Superior district, says the *Lumberman's Gazette*, are that the cut will be about the same as last winter. Pine lands have been in good demand for the past spring and summer, and a good deal of stumpage has changed hands. This will not effect the present cut, as investors have purchased to hold lands for a few years, the prospect being that in three years the pine will increase 50 per cent. in value.

LIVERPOOL STOCKS.

We take from the *Timber Trades Journal* the following Comparative Table showing Stock of Timber and Deals in Liverpool on Oct. 1st 1884 and 1885, and also the Consumption for the month of Sept. 1884 and 1885:—

	Stock, Oct. 1st. 1884.	Stock, Oct. 1st. 1885.	Consumption for the month of Sept. 1884.	Consumption for the month of Sept. 1885.
Quebec Square Pine	392,000 ft.	314,000 ft.	304,000 ft.	302,000 ft.
Wancy Board	500,000 "	596,000 "		
St. John Pine	63,000 "	33,000 "	29,000 "	00,000 "
Other Ports Pine	61,000 "	70,000 "	8,000 "	3,000 "
Red Pine	59,000 "	33,000 "	7,000 "	0,000 "
Pitch Pine, hewn	606,000 "	568,000 "	48,000 "	76,000 "
Sawn	510,000 "	855,000 "	62,000 "	245,000 "
Planks	67,000 "	100,000 "	25,000 "	49,000 "
Dantzig, & Fir	67,000 "	51,000 "	8,000 "	12,000 "
Sweden and Norway Fir	109,000 "	67,000 "	8,000 "	2,000 "
Oak, Canadian and American	310,000 "	421,000 "	104,000 "	106,000 "
Planks	179,000 "	184,000 "	67,000 "	50,000 "
Baltic	9,000 "	5,000 "	0,000 "	0,000 "
Elm	43,000 "	66,000 "	17,000 "	20,000 "
Ash	46,000 "	35,000 "	12,000 "	11,000 "
Birch	102,000 "	213,000 "	41,000 "	68,000 "
East India Teak	71,000 "	112,000 "	6,000 "	5,000 "
Greenheart	32,000 "	119,000 "	18,000 "	6,000 "
N. B. & N. S. Spruce Deals	25,770 stds.	20,961 stds.	8,129 stds.	11,451 stds.
Pine	1,082 "	250 "		
Quebec Pine & Spruce Deals	9,362 "	6,493 "	2,868 "	2,897 "
Baltic Red Deals, &c.	3,982 "	4,806 "	742 "	700 "
Baltic Boards	67 "	354 "	67 "	127 "
prepared Flooring	2,172 "	3,361 "	842 "	988 "