

MILL ECONOMY.

Notwithstanding much has been said upon the subject of mill economy, there still remains much to be said upon the subject that planing mill proprietors and those of other wood-working establishments may profit by. In an article published in one of the leading trade journals not long since, the writer criticises the manner in which the machinery in otherwise first-class mills is arranged, even going so far as to attribute many of the failures in the various wood-working trades, where a large amount of machinery is used, almost entirely to this cause.

There is no question but, taking the average planing mill or sash and door factory, no matter how well it may be arranged, that a large item, if not one of the largest in the running expenses, consists in the handling of the stock. From the moment the lumber is received from the yard to the time the finished work is loaded for shipment or delivery, there is a constant process of handling as it progresses from one machine to another. There is no definite manner by which a separate account of all these items can be kept in the average shop where a number of different jobs are going on at the same time. Consequently, the particular cost of handling the materials for each separate job, aside from the machine work and finishing, is an unknown quantity, which can not be solved even by algebra, yet it finds its way into the expense account all the same and is plainly manifested in the balance sheet of some mills at the end of the year.

Now if the item for handling stock in a well arranged mill is of so much importance, what will it be in a mill where, as the writer referred to states that, "the machines appear to be placed just where the truckman dumped them, without any reference to economy or convenience in handling the material which must necessarily pass from one machine to another." It is a fact that is worthy of consideration, that, as a rule, in nearly all wood-working establishments, more particularly in planing mills, about the same process of manipulation is followed. The lumber, as a rule, is first submitted to the saw and from there distributed to the various machines, according to the nature of the work.

As the largest amount of the material in the planing mill, after leaving the saw, goes to the planers, these machines should be placed in close proximity with each other and so arranged that when the lumber leaves the saw it is dropped just where it is wanted, in front of the planer, without any further handling. But if the saw table is placed upon one side of the mill and the planer upon the other, as is frequently the case, so that the lumber must all be carried from one to the other, it will require the labor of one man or boy constantly to perform that part of the work, and whatever his daily wages may amount to is just so much needless expense added to the cost of handling. It is true that where there are a large number of machines in a mill, all can not be placed in such close proximity with the saw as to avoid a certain amount of handling and transferring from one part of the mill to another, but where such is the case, instead of employing a number of men and boys for this purpose, a few light two-wheeled trucks should be provided, so that the Sawyer, instead of dropping the strips upon the floor to be picked up again and carried separately to their destination, could place them upon one of these trucks, so they may be easily wheeled to any part of the mill. By the use of a few trucks of this kind one man will be able to perform the same work that would require three men to perform otherwise, and the wages of two men saved.

In many of the modern mills, provision is made for driving into the mill with a load, so that the lumber may be unloaded by the side of the machine where the first operation is to be performed; and, notwithstanding this is an improvement over the old method, yet in the further operations handling becomes necessary and the use of a number of small trucks, so placed that as fast as the stock comes from the machine it is deposited upon the trucks, instead of the floor, will always be found useful in facilitating the work and save handling. Every dollar saved in this manner, as well as many other small items that might be mentioned, goes a long way in the course of a year in either increasing or diminishing the profits of the concern.

Doing Away with the Saw.

A correspondent writing from Seattle, Wash., to an exchange says: An industry which was lately started at Ballard, a suburb of this city, promises to work a revolution in the shingle business. This is the dressed shingle mill of the Porter-Gage Company, where the Gage patent shaved shingle machine is in use. In many markets shaved shingles are held in high esteem on account of the smooth surface of the shingle, which allows the rain to run off. The cost of painting is also materially reduced, as there are no rough places to be filled up. Recently, when at Ballard, I called at the mill in question and was shown over the plant by Mr. Gage.

One hundred and sixty cuts a minute were being made by the machine, the shingles dropping on to an endless carrier, which conveyed them to the joining room. The blocks differ in no respect from those used in any other mill, except that they are first put into a box and thoroughly steamed. This takes all the sap and albumen out of the timber and softens it to facilitate cutting. The block while hot from the steam box is placed in the machine and firmly dogged in a head block which feeds it automatically to the knife in a zig-zag manner (to correspond with the alternate butt and tip of the shingle) by rack or series of teeth on each side of the head block. These teeth feed the block a little further than the thickness of the shingle being made, but this extra thickness is pressed back by a set of rollers that are located just behind the knife and a sufficient distance ahead of it to let the rollers strike the block before the knife enters it. The object of this is to compress the fibres of the timber and to hold the block firmly against the head block while the knife is going through.

When running ten hours a day the machine will make from 80,000 to 100,000 shingles, and the success of the shingles so far produced has been such that another machine has been ordered. The product of the mill has been sold for several months ahead. I asked for the figures of the saving effected by the new machine, and Mr. Gage placed a number of shingles together just as they came from the machine. The block thus made measured four inches and contained 18 shingles and showed that no wood was missing from the original block. The shingles were five to two inches, and a saw would at the very best have made but 12 shingles from the same timber. The machine therefore makes 50 per cent. more shingles than is made by the saw. The company has made tests with redwood with equal satisfaction, but the company's operations at present are confined to Washington red cedar, and the whole product is being shipped to eastern markets.

Lake of the Woods.

A meeting of lumbermen was recently held at Rat Portage, at which every mill manufacturing pine lumber between Lake Superior and Winnipeg was represented. The principal matter under consideration was the cutting in prices. The price list was revised slightly and it was decided to advance 1st and 2nd flooring \$2 per thousand, and 8 inch flooring was reduced \$1.

Following is the new price list for lumber, f.o.b. at Lake of the Woods mills. Dimension 2x4 to 12x12. 12 to 18ft long, \$14; do. 10, and 20ft long, \$15; \$1 per M advance on each inch over 12in surface. 50c. per M advance on each foot over the above lengths to 24ft long. \$1 per M advance on each foot over 24ft long; surfacing, 50c per M; surfacing and sizing, \$1 per M. Boards: 1st common, rough, \$16.50, dressed, \$17.50; 2nd common, rough, \$14 dressed, \$15; Culls, rough, \$10, dressed \$11; 1st common, stock, 12in, rough \$19, dressed, \$20; do. 8 and 10in, rough, \$18, dressed, \$19; 2nd common, stock, 12 in. rough, \$16, dressed \$17; do. 8 and 10 in. rough, \$15, dressed \$16; 10ft long and under, \$1 less per M. Shiplap. 8 and 10in \$16; 8 and 10in flooring and siding at \$1 per M advance. Siding, ceiling and flooring. 1st, 6in, \$31, 2nd, 6 in, \$27, 3rd, 6in, \$21, 4th, 6in, \$16; 1st, 5in, \$31, 2nd, 5in, \$27, 3rd, 5in, \$21, 4th, 5in, \$15, 1st, 4in, \$31, 2nd, 4in, \$27; 3rd, 4in, \$20; 4th, 4in, \$15; \$1 per M advance for dressing on both sides. \$1 per M less for lengths 10 feet and under. Bevel Siding. No. 1, 1st

siding, 1/2 in x 6in, \$20. No. 2, 2nd siding, 1/2 in x 6 in. \$17. Finishing 1 1/4, 1 1/2 and 2in. 1st, 2nd and 3rd clear, \$40, select, \$30, shop, \$25. 1 inch, 1st, 2nd and 3rd clear, \$35; No. 1 stock, \$35; No. 2 do. \$30; No. 3 do. \$25. Mouldings: window stops, per 100 ft. lineal, 60c; parting strips, do, 50c; 1/4 round and cove, do. 60c. Casings: 4 in. O. G. per 100 ft lineal, \$1.75; 6in O. G. do. \$2.25; 6in O. G. do, \$2.50; 8in O. G. base, do \$3.50; 10in O. G. base, do, \$4.25. Lath \$2. Shingles No. 1, \$3; No. 2, \$2.25; No. 3, \$1.50; No. 4, \$1.

A Five Thousand Dollar Tree.

On the side of the Big Black Mountain, three hundred yards from Wise County line, in Harlan County, Kentucky, and about ten miles from Big Stone Gap, there stood, until last week, a tree that is thought to be the most valuable tree in the South Appalachian Mountains, and is perhaps without a peer on this continent. It is a curled-grain black walnut, and the owner had it grubbed up by the roots, so as not to lose even a chip. It is between five and six feet in diameter at the base, and five cuts, eleven feet each, have been sawed, the diameter of the nth cut being four feet. Some additional smaller cuts were gotten out of the top. The grain runs in graceful, wavy curls, and is one of the most valuable woods known, being used in veneering. Capt. Pleasants, of New York, who for years has dealt exclusively in this class of timber, purchased it for \$40 from a mountaineer, and thinks it is the finest tree he ever saw. He paid George H. Satterfield \$300 to move the trunk six miles, to the end of the S. A. & O. R. R., on Looney Creek, whence it was shipped direct to the factory in New York. Capt. Pleasants thinks that the tree will realize for him at least \$5,000.

Brandy from Wood.

An eminent German sanitary expert says that the chemists have succeeded in making a first rate brandy out of sawdust. A man can therefore, get a rip saw and go out and get as drunk as a lord on a fence rail. A man can make brandy smashes out of the shingles on his roof; he can get *delirium tremens* by drinking the legs of his kitchen chairs. You may shut an inebriate out of a gin shop, and keep him away from a tavern, but, if he can get uproarious on boiled sawdust and desiccated window sills, any attempt at reform must necessarily be a failure, and we think that the opinion of a sanitary crank upon the jim-jams of a house should be taken with a most liberal grain of allowance.

Trees Six Hundred and Fifty Feet High.

Prof. Fred. G. Plummer, the civil engineer of Tacoma, is quoted in the *Olympia Tribune* as saying: "I have been all over this country and have the best collection of flora to be found anywhere. What do you think of these trees six hundred and fifty feet high. They are to be found that high in the unsurveyed townships near the foot Mt. Tacoma, and what is more, I have seen them and made an instrumental measurement of a number with that result. There are lots of trees near the base of Mt. Tacoma whose foliage is so far above the ground that it is impossible to tell to what family they belong, except by the bark. Very few people know or dream of the immensity of our forest growth. I wish that some of our large trees could be sent to the World's Fair at Chicago. We could send a flag pole, for instance, three to four hundred feet long."

FIRE RECORD.

John Millard's lumber mill at Broad River, N. S., was totally destroyed by fire last month. Loss about \$700.

Albert Turner's saw mill, at Black River, Kings county, N. S., was recently burned with a quantity of lumber. Loss \$1,000; no insurance.

Wm. Sutherland's saw mill near Belleville, Ont., burned Oct. 7th. It had been idle over a year. Loss \$2,000; no insurance.

O. F. Doray's saw mill and chair factory was destroyed by fire, Oct. 12th. Loss estimated at \$10,000; insured for \$2,000.

DeWinter's steam saw mill on the New Ross Road, King's county, N. S., was recently burned. There was no insurance.