

PROPOSITION TO CURTAIL THE CUT.

There has been a movement started at Eau Claire with the object of curtailing this year's cut of lumber in the Chippewa Valley, and as much of Wisconsin as possible, by an early shutting down of the mills—say on September 15 or October 1. A meeting of the manufacturers has been held at Eau Claire, at which it was determined to use persuasive means to gather into the movement as large a number of manufacturers as possible. It was decided that if sixty per cent. of the north Wisconsin mills could be embraced in the agreement to shut down early it would be safe to do it. Letters have been sent to Wausau, Stevens Point, Merrill and other points in middle Wisconsin, urging the scheme, and asking for an expression of views. It is held by the prime movers at Eau Claire that a restriction of the season's output of lumber is absolutely necessary in order to prevent an utter collapse of prices, especially in common stock.

The movement also contemplates a wider reach than Wisconsin. Prominent manufacturers in this city have received letters asking co-operation of all the mill interests around the lakes.

It is thus to be seen that an effort will be made, probably through the agency of the Northwestern Lumber Manufacturers' Association, to induce a general shutting down of the mills, about October 1, all over the Northwest. But whether or not the sweeping object be attained, the Eau Claire manufacturers mean business so far as the Chippewa valley mills are concerned. A circular is now being prepared setting forth the particulars of the proposition, and within a few days all the mill men of the Northwest will be treated to a copy of it.

There will certainly be one difficulty in the way of carrying the proposed measure into effect. On some of the larger streams, like the Menominee and Muskegon, continuous sawing is necessary in order that each mill be served with logs. Some of the mills have contracts to saw a certain amount for outside parties, and the logs which are back in the stream must be delivered as they come down with the entire mass: in no other way can they be reached. A shutting down of mills not sawing on contract would blockade the entire business of delivering to mills that were. Still another difficulty is in the way of successfully carrying out the scheme: It would be impossible to prevent the determination of the manufacturers to shut down at a certain date from becoming known, and that would stimulate mill operators to drive their saws to the utmost speed prior to the time specified, in order to pile up lumber and be ready for the forced scarcity. It is doubtful if the mill men along the east shore of Lake Michigan will listen for a moment to the proposition to curtail the cut. They owe a small one to the "Menominee fellers," having last spring determined to run their mills for all there was in them, irrespective of any attempted combination. A lumber market growing sicker and sicker during the summer may, however, modify their views on the matter that latter or they may be willing to do anything for relief.—*Northwestern Lumberman.*

FIREPROOFING OF WOOD.

Several preparations exist which render wood impervious to heat, and also increase its durability. Some of these solutions have been tested on a large scale, and have proved a success. Although these measures are cheap and their success demonstrated, they have, with few exceptions—as, for example, at Frankfort-on-the-Main, the Hoftheater at Berlin—not been employed. Perhaps constructors of theaters will, in view of those frequently occurring catastrophes, at last comprehend that even the incombustibility of the woodwork would be of inestimable value in securing immunity from fires in theaters, and that the spreading of flames would be greatly retarded when, instead of burning rapidly, as dry wood well, it slowly without flames, chars into coal. The nature of wood makes it an easy matter to change it into what an erulant chemist has called a fire-proof substance. On account of its porosity a solution applied to its surface sinks deeply into its pores, thereby attaining a firm hold, and on

account of its rigidity exposes the covering to abrasion only. Care should be taken where such solutions have been used, to replenish them from time to time, so as to keep the wood entirely covered. It may be well to state here what is meant by "fireproof." As this term is usually used, it signifies the property of remaining intact in high temperatures such as are produced by the conflagration of buildings; but this is not the state impregnated wood or scenery is in. These are destroyed when in contact with a flame; not, however, by burning, but by charring. If we would hold a piece of impregnated scenery in the flame of a Bunsen burner, we will find that the part which was in contact with the flames has been destroyed, that is, it has been charred without producing flames or injuring the parts not in direct contact with the gas flame.

In experimenting on the impregnation of wood, canvas and gauze, I was particularly careful to use only chemicals as they appear in commerce, and undistilled water. In my opinion one of the chief causes of failure in methods in practice which were successful in experimenting, is that the chemicals employed in experimenting were the pure reagents of the analytical chemist, while those in practice contain many impurities which must necessarily alter the results arrived at by purer supplies.

One of the oldest and best known processes is the coating of woodwork by water glass (sodium tetra-silicate), which for a short time gives good results, but soon the covering drops off. The reason for this is that a covering of water glass is as brittle as ordinary glass, and is readily cracked and broken; and secondly, as it dries very rapidly, it does not enter any distance into the pores of the wood, but rests on the surface. Any jar or abrasive action will, therefore, cause the water glass to drop off in small chips. Another objection to this substance is its solubility. It cannot be employed in places exposed to the action of water.

Another process is to paint wood with a solution of three parts of alum and one part of sulphate of iron; after the wood has received two or three coats of this solution, it is thoroughly dried; then a solution of potter's clay and sulphate of iron, having the consistency of paint, is daubed on the prepared wood until all pores are filled, and a thin layer remains on the surface. It is claimed that in this process the alum and sulphate of iron enter deeply into the fibers of the wood, and form indestructible compounds with the chemical elements of the fibers, which cling tightly to them and cannot, as in the case of water glass, be readily washed out. The covering of clay greatly protects the wood from moisture, so that the first solution cannot be washed out or thrown out by the action of the frost. This sounds well, but in practice would be too complicated.

Another objection which makes it valueless for theaters is that the clay on the surface comes off very readily in the form of dust, and, therefore, must frequently be renewed; it is also an unclean process; an actor unconsciously leaning against a piece of wood thus prepared would afterward appear before the audience with a strip of clay dust on his back.

The following is also a complicated process: The wood is painted with hot glue water until all pores are filled, the number of coats depending on the porosity of the wood used. Then apply to the surface, before the glue dries, a powder consisting of one part of sulphur, one of ochre (or clay) and six parts of sulphate of iron. Care should be taken to powder and mix these substances well before applying them. This process labours under the same difficulty as the preceding one described.

TO FINISH PINE.

Pitch pine has of late years come into extensive use in England for the furniture and fittings of churches and chapels, and for the woodwork of private dwellings and public buildings. This wood is, in many instances, very beautifully marked in the grain, and is admirably suited for all purposes where strength and durability are desired. It is in its nature exceedingly resinous, and it is the fact of its being so thoroughly impregnated with resin

which makes it so durable. As a rule, the practice is to varnish or French polish the better class of wood when made of this wood. French polishing on pitch pine cannot be done under three times the cost of giving it two good coats of good varnish, so as a natural consequence the latter method will, and in fact does, prevail. Pitch pine has a strong tendency to quickly get darker in color. This arises chiefly from the effect of the air upon the turpentine and resin contained in the wood (just as varnish gets dark by exposure), and therefore, except the work is required of a dark color to begin with, we would advise that no stains be used on the mass of the work, and that the varnish used be as light colored as it is possible to be got, for if we varnish with a common dark colored varnish the wood will all the sooner become discolored. The work is first coated with a glue size in order to partially fill up the pores of the wood, and make an impervious surface to prevent the varnish sinking into it. This size has also the effect of preventing the discoloration of the wood, through absorbing the varnish, and this is more especially the case if white pine is used, it being softer and more absorbent than pitch pine. The glue size should not be too strong, or it will crack and chip, and it is better to give the work two thin coats of this than to risk failure by one thick coat. Two thin coats will sink into the wood and so have a firm hold, while the thick coat will remain on the surface and be easily chipped off. The size used should be free from any foreign matter and carefully strained before being used. Another plan dispenses with the use of size altogether, is to give the woodwork a coat of Japaner's gold size thinned with turpentine; this sinks into the wood and produces a hard and firm body for the varnish to be laid upon. By this method the varnish becomes an integral part of the wood and cannot chip or peel off. Of course this process costs a little more than when size is used, but it is so little that it ought not to be a consideration in good work. When the work is to be French polished, no sizing is required.

Many kinds of staining colors may be used for coloring pine, and any desired tint obtained, but except for the purpose of imitating inlaid woods, pitch pine or white pine should never be stained any other color than the darker shades of its own natural color, not necessarily to represent dark old oak, but to represent what it is in reality, pine stained dark. Simple staining solutions are the best. Many very excellent stains may be got by using the ordinary graining colors, viz.: Vandyke brown, raw and burnt sienna, ultramarine blue, etc. In using any of these stains, or in fact any water stains, it is a usual practice to put them on with a brush, and so leave them, but we have found the best plan to be as follows. If we want a dark color, we use Vandyke brown or best Turkey umber with water, tolerably dark in shade. With this we brush over the wood without any previous preparation. We let it stand for a few minutes, then wipe as much of the color off again as we can with a damp rag or cloth. It will then be found that a certain amount of the stain has sunk into the soft parts of the wood, and less so on the hard parts of the grain. By this plan, we bring out the grain or marks of the wood clearer and more distinct than when it is left from the brush alone. If the stain is not deep enough, another coat may be applied in the same manner. For a mahogany stain we use burnt sienna with a little Vandyke brown, then glaze over with Victoria lake; if a yellow stain, raw sienna; for a blue stain we use ultramarine blue, and by adding raw sienna to the blue we form a dull shade of neutral green; for a gray stain, blue-black, with a very small quantity of ultramarine added, and so on *ad infinitum*. All these are permanent colors, which is, of course, an important consideration. We could get more brilliant colors by using scarlet, crimson or purple lakes, but these are fugitive colors, not fitted for use on any works intended to last. It will be understood that we are now speaking of staining woodwork in the mass; that is to say, without imitating inlaying, although most of these colors may be used for that purpose. We here give a list of transparent and semi-transparent colors which may be used as stains:

Red Stains.—1. Burnt sienna. 2. Logwood. 3. Burnt ochre. 4. Madder Lake.
Yellow Stains.—1. Raw sienna. 2. Saffron. 3. Gamboge.
Blue Stains.—1. Ultramarine blue. 2. Indigo. 3. Cobalt.
Brown Stains.—1. Vandyke brown. 2. Turkey umber. 3. Black Japan.
Green Stains.—1. A mixture of Gamboge and Indigo, Gamboge or raw sienna, and ultramarine blue.—*Journal of Progress.*

SWEDEN.

The correspondent of the *Timber Trade Journal* writes to that paper as follows:—
STOCKHOLM, June 28th, 1884.—Advice from the north of Sweden are to the effect that a large rainfall having again occurred there, the floating in the principal districts is being very successfully prosecuted. The importance of this fact is clearly seen in the very inanimate condition of the trade, as a whole, that has been observed during the last few weeks.

With the exception of the demand for white wood battens and boards, which has been lively lately, market are getting into a very unsettled condition; and the worst of it is that but little prospect of revival exists for the present. Every mail brings us the intelligence of diminished activity in the coal and iron trades of both Great Britain and Belgium, while the shipbuilding industry in the former country is in a state of collapse. A further diminution of consumption in the above countries may therefore be confidently expected, and ought to be met here by a corresponding decrease in the sawing. The quantity of logs now under process of floating in the Hernösand and Sunds wall districts, as well as on the Dal River, is somewhat less than what came down last summer; but as the decrease is probably not over 10 per cent. on an average, there is likely still to be an access of first-open-water stock next year, unless active measures are taken to prevent it.

Shipments have lately fallen off considerably from the three principal shipping districts of the lower Gulf, and although the shipments in May have possibly not been so much less than those of the corresponding month last year, those of June, I anticipate, will show a reduction.

As remarked before, the demand for certain sizes of whitewood has improved lately, and slightly better prices are now being quoted: £5 15s. for 6 and 11 in. unsorted deals, and £1 15s. for 2½ x 7 and 6½ battens are being asked in lower Gulf, but I am not aware whether these figures have been paid. About £1 12s. 6d. has been obtained for white battens on c.i.f. sales, shippers in several instances having managed to squeeze about half a crown more through cheap charting than had been calculated on. For best redwood brands from Gefle district I have been given to understand that £11, £9, £6 10s., and £5 10s. for 3x9 and 11 red deals have been lately declined for a fair-sized line. Purchases from same district can, however, be effected for even less than these figures, for marks that are not quite as well known. Sellers in both the Soderhamn and Gefle districts have not sold nearly their usual quantity to Grimsby and Hull this season. Importers in the two towns named say that they have done better in Finland, whereas your Helsingfors correspondent informed us some time ago that, to the best of his knowledge, but little had been sold to England from that country, better prices having been reached on the continent. I presume the real truth to be that the great Humber ports have bought very little so far, and are waiting for anticipated further fall before stocking up with best redwood goods.

Freights show a very slight disposition to rise for July shipment, and sailing vessels are holding out for a shade higher rates. Much depends on the position of the vessel and whether of suitable size for an order that may happen to be in hand.

RESPECT OLD AGE.—An old favorite is the remedy known as Dr. Fowler's Extract of Wild Strawberry. Thirty years reliable for cholera morbus, diarrhoea and summer complaints.

NO SUCH WORD AS FAIL.—A failure to relieve or cure summer complaints can never be truthfully applied to Dr. Fowler's Extract of Wild Strawberry. All dealers sell it.