

## CHICAGO SHINGLE TRADE.

The movement of shingles in the Chicago market during 1885 was something remarkable—not on account of the large comparative amount handled, for much less than 1884, but because it was so disappointing of expectations, and so unevenly distributed through the year. In 1884 the sales and shipments of shingles from the yards of this city reached a total of 1,007,458,385, while in 1885 the total was but 632,240,011 or nearly 400,000,000 less. This comparatively meagre movement of shingles from Chicago yards is another proof of what the *Lumberman* declared throughout 1885, that the strictly rural or farmers' demand for yard stocks was small in proportion to the city demand. Where there is a heavy distribution of lumber into country districts, there is a proportionate large call for shingles. There may be a great consumption of lumber in city building, but since a large majority of urban houses are covered with other roofing material than wood, there are fewer shingles required than in country building.

The Chicago trade in shingles in 1885 started out with sales and shipments of but 1,675,336 in January, and 5,310,500 in February, as compared to 26,767,246 and 82,139,000 in corresponding months of 1884. But in March of last year the demand for shingles took a spurt, and the yards in that month got rid of 116,071,975 as compared to 66,823,747 in March 1884. This exhibit shows again how lively the wholesale yard trade was in March last year, and how it was largely the result of a country demand, which always calls for a greater proportion of shingles than the city trade. But after March the shingle trade last year fell off sadly in comparison with the year previous. In July it amounted to but 3,699,350, while during the same month in 1884 89,116,955 were disposed of. During December, the last month of the year, the amount moved out of the yards was about the same as the year before, namely, 14,246,009.

It is probable that no difference in the prices of shingles caused the relative difference in distribution between the two years. The supply in 1884 crowded the market more than it did in 1885, receipts in the former being 895,523,000, and in the latter 770,727,000. We are forced to the conclusion that the falling off in the shingle trade last year was wholly owing to a relative decline in the strictly rural demand for both lumber and shingles.—*Northwestern Lumberman*.

## PRESERVATION OF FORESTS.

The rapid destruction of the forests of New York state, and the consequent droughts in summer and destructive floods in spring, led last spring to the appointment of a forestry commission, whose first report has been presented to the State Legislature. They remark that it has not been possible for them to more than familiarize themselves with their duties, and to acquire knowledge as to the wants and dangers of the forests through the intelligent exertions of special agents under their direction. The Commission ask time to prepare and present a further report, and recommend certain amendments to existing laws, such as the prevention of forest fires, trespassing on forest lands of the state, and the removal of timber, the injury of forests by railroads, and a provision for the conveyance of certain lands now forming part, but it is believed by the Commission erroneously, of the forest preserves. Our neighbors are taking active and practical steps to remedy a serious evil. In Canada we are already brought face to face with a problem of a similar character—how to prevent the rapid destruction of our forests without retarding the settlement of our wild lands. Hitherto the object of the Crown Lands Departments in Ontario and Quebec has been to destroy the forests with all possible speed. No settler could acquire a title to his property without removing from its surface at least ten per cent of the standing timber within a period of two or three years, even though, in its removal, he should find it necessary to burn the forests for miles around. Failure to destroy the timber entails, in the Province of Quebec, confiscation of the property and forfeiture of the amount paid for it, and of all improvements. It may

yet dawn on the minds of those who manage the public domain that the forests are not only a source of public wealth, but that they are necessary to protect the country from disastrous floods in spring, and parching droughts in summer.

Lately a disposition has been manifested to exclude parts of the country, which are mainly valuable for their pine forests, from settlement. It has been found, as the result of a painful and costly experience, that to sell a lot in such a district to a settler is to destroy pineries of inestimable value. It has taken a long time to get this idea into the heads of Crown lands officials, but the fact that they have learned a lesson, even at the price which has been paid for it, gives reason to hope that they, or their successors, may yet realize the importance of preserving our diminished and diminishing forests before they cease to be any left to preserve.—*Ottawa Journal*.

## FORESTRY.

The necessity of the preservation of forests is conceded by all civilized nations. So pressing has become the necessity of restricting this waste in other countries that laws have been enacted for that purpose by several of the governments of continental Europe.

The bureau of the forest administration of France reports that the French forests yield an annual surplus of about \$3,500,000. It states that France has about 17.3 per cent. of her superficial area in forests. The public or domain forests amount to 10.7 per cent of the forest area. The forests of Algeria are new and undeveloped as yet, and are a charge upon the state to the extent of \$300,000, and in spite of this burden the care of the forests clear annually \$3,600,000 above expenses; and while securing this handsome revenue France is securing by the maintenance of her forests the best climatic conditions for the health of her people and the success of her agriculture, and is preserving the flow of her streams in a condition serviceable to agriculture, manufacturers and commerce.

Efforts are now being made by prominent naturalists in England to make the forests and woodlands of that country more productive by the establishment of a public forestry school.

The United Kingdom has about 3,000,000 acres of forest and it is estimated that in the colonies belonging to the empire there are no less than 340,000,000 acres of woodland.

So far is this, however, from being generally recognized that there is no place in England where pupils can learn the principles of forest conservation and management, and the officers intended for the Indian Forest Service are sent to the French forest school at Nancy to be instructed, while the public woodlands in Cyprus, at the Cape of Good Hope, are intrusted to the care of foreigners, for want of British subjects capable of looking after them.

To show the advantages which would follow the adoption of a better system, Sir John Lubbock, the distinguished naturalist, moved lately in the British House of Commons that a committee be appointed to ascertain whether the forests and woodlands of England could be made more productive of by the establishment of a public school of forestry, such as now exists in nearly every other civilized country. He said that the interests of Great Britain on the subject are really greater than that of any other nation. He cited the example of the Landes, a vast plain on the west coast of France which 30 years ago was a marshy waste, over which a few shepherds, perched on long stilts to keep themselves out of the mud, and drove their poor flocks, but which is now, thanks to Brementier, who took the first step towards its reclamation by planting a few maritime pines along the sand hills which line the shore, one of the most prosperous districts in the Republic, busy with the manufacture of turpentine and timber from more than a hundred thousand acres of recently planted forest, and officially rated as having increased in valuation about \$200,000,000 within less than a generation. To this illustration he added one more for the recent history of India, where 15 years ago the annual public revenue from forest property was \$110,000.

Soon after that time an Indian Forest De-

partment was established, which provides expert direction for the maintenance and increase of woodland, and the forest revenue has since rapidly increased, amounting now to more than \$2,000,000 a year, or about 20 times as much as it was just before the establishment of the Forest Department.

In seconding the motion of Sir John Lubbock, Dr. Lyons remarked that the best authorities now believe that in order to keep a cultivated country in the most productive condition from one-fourth to one-third of its area should be covered with woodland, as a protection; and Mr. Gladstone, whose fancy for wielding an axe is well known, showed his knowledge of the subject by remarking, in answer to a rather personal allusion from one of the speakers, that the judicious felling of trees is necessary to the proper maintenance of a forest; and that nothing tended more to perpetuate the neglected and useless condition which educated foresters observed in English woodland than the superstition of the owners, who looked upon the cutting down of a tree as a sort of sacrilege, instead of the means of developing the saplings about it.—*Exchange*.

## CIRCULAR SAWS.

I. T. Landon writes in *Cabinet Making and Upholstering*: We cannot do much sawing until we have got a saw in and set it to work. But I believe we have already done that. The table and arbor and saw are in due position. The saw plate is perfect. The teeth are filed and set, and we are standing with coat off and sleeves rolled up waiting for a job to try and see what we can do. Well, here comes the first job. A very simple one if we knew how to do it. A square stick to be split from corner to corner. Don't set your gauge that tips, to a miter, and fasten on a block to the table to keep it from slipping down, but just measure across with a rule from corner to corner and set your gauge to half the distance allowing for the width of saw kerf. Tip the piece to be sawed up on the corner and bring the other corner up to the gauge, so that when you push it up to the saw the saw will cut in the centre of the corner that is up. Hold the stick firmly in that position till the whole length of the stick is sawed and you find the piece very nicely cut from corner to corner. Any number of pieces may be sawed in that way with no more trouble than sawing straight flat work; only you must keep the stuff up so the saw will always cut exactly through the top corner.

The next job that comes along is this: A man has a round tank to build that is smaller at one end than at the other, and the staves all of a size. There are two ways to do this job; but one is better than the other. With either we must saw a pattern. After the pattern is nicely made put the small end up against the gauge and measure off the width of the wide part of the stave between the saw and the pattern, keeping the piece to be sawed up close to the pattern and even at one end or the other, push through steadily and you will find that you will have an exact duplicate pattern. Turn the pattern for every piece you saw and your stuff will come out even. The other way is to lay your pattern on and mark out every piece by it and saw by the lines. This line sawing is a nice job, and there are but very few good line sawyers in the market. Unless the stock is knotty and you are obliged to mark out every piece to save stock, it is much better to saw with the pattern against the gauge. Where there is plenty of carriage sawing you may find good line sawyers, but in ordinary shops the good ones are few and far between.

While speaking of line sawing I will offer a few suggestions about it. Never take a board or a plank up and stand on one side of it if you wish to come anywhere near the line for any distance. Hold the piece to be sawed directly in front of the saw, and when you start in strike the line fair and square in the centre. If you are not much used to sawing, push along the work carefully so you may keep directly on the line. Don't push along heedlessly and then condemn the saw for spoiling the work, when a little patience and care would have saved both the stock and bad words too. If you saw the first cut well, you will gain confidence; only don't let your confidence lead you into carelessness.

ness. With this kind of sawing, especially, there must be care taken till you know just how to do the work well. Then you can go ahead and do it fast. But always be sure you can do it well before you try to rush it. Band sawing is a splendid school for line sawyers, and yet there is a difference in sawing to a line with the different kinds of saws.

I ought to have said when speaking of sawing stuff cornerwise, that the same principle might be used in sawing square timber if we did not want to go to the middle. Run a gauge along on two sides of the stick, measure the distance from the corner to the gauge line, and set the saw gauge just that distance, turn the stick up till the saw cuts the line, which follow closely and the work will come out good every time. Let's go into a place now where they are sawing large circulars like freight car rafters out of good hard oak or ash planks. You will see a lot of heavy planks two inches thick piled up with a circle marked on the edge of each one just the shape of the top of the rafter. They are all sawed to this line and piled up again by the saw bench where a curved gauge is kept and used for just this purpose.

After adjusting the gauge a little the planks are pushed through as easily as if they were straight pieces; every one has the right curve and they go directly to the molder to be finished cornered. This is work that might be done on band saw, but if it was done there each rafter would have to be marked out by a pattern; the work can be done faster on a circular saw than with a band saw. There is of course a limit to using the circular saw for cutting carved work, but where the circle is large enough the circular saw does the work quicker and better.

A vast amount of beveled work, as well as cutting stuff at all possible angles, can be done on common wooden top saw benches, if we only have the ingenuity to get up some simple rigs, which, once made, are of great value for jobs that otherwise would be long and tedious. Two grooves in the top of any saw table will put almost any one in the way of doing a great variety of very nice work.

## THE LUMBER TRADE.

A shipment of 150 standards of white pine has been made from Ottawa to Liverpool via New York on a through rate of freight of 70s. A Norwegian vessel has been chartered to take on a cargo of lumber and deals at Quebec for London at 20s. lumber, and 60s. deals. The outlook is certainly favorable for a good lumber trade during the coming season, both for export and home consumption. A local dealer stated that he had good reasons for believing that building in Montreal would be fairly active during the present year.

Advices from Duluth report the heaviest transactions in lumber that has taken place there for a long time past, the sale being made by the Carleton Lumber Company to D. H. McEwen, of St. Paul, comprising 1,300,000 feet of lumber to be delivered in St. Paul within a month. Reports from Detroit state that the prospects for the coming season are bright and that operators are very hopeful.—*Trade Bulletin*.

## A SILLY SUPERSTITION.

QUEBEC, Jan. 27.—Hector Bouchard, who is employed in the shanties of Messrs. Price Bros., at St. Etienne, on the Sagueny, was instantly killed on Sunday by the discharging of a gun. It appears that it is the habit of these shantymen to blow in the barrel of a gun, believing, through superstition, that any request they ask will be granted by performing this strange freak, which is enacted by placing a cap on the nipple, and while the performer is in the act of blowing in the muzzle to pull the trigger and fire off the cap. If the performer displays any fear his prayer will not be answered, he being regarded as unfaithful. It was during this performance that the gun, which was loaded, suddenly discharged and the bullet entering Bouchard's mouth and coming out at the back of his head, killed him instantaneously.

THE Grand Rapids Chair Company has bought 3,000,000 feet of maple logs at Kalkaska, Mich., paying \$4 a thousand for them.