"SPARE THAT TREE."

The Lumberman's Gazette says that when articles are written about the preservation of the tumber of this country, they are always directed coward the consideration of the pine, and eloquent language flows from pencil points, and arrays of figures are marshaled to show how great is the urgency in that behalf. But the larger body of other sorts of timber is forgotten as of no consequence, or not subject to the depleting process. There is, novertheless, and has been constantly going on since the first settlement of the country, a remorseless war upon the oak and ash, elm, poplar, hemlock, maple, and every other variety of wood growing in the grand forests with which this goodly land was covered. Thus far this waste has doubtless been unavoidable. To reduce the virgin land to fruitful fields the forests must needs be felled. for grain could not be grown under the branches of the trees. In the undeveloped condition of the western world there was no other course to pursue but to reduce even the best tiwhes. Thus a vast offering in oak and asn and walnut, and every other goodly tree, was sacrificed on the log-pile of the settler to the spirit of development. There were no means of getting the timber to market had there been demand for it anywhere. But there is no longer a reason or excuse for the sacrifice. The land is divided by railroads almost as a farm by fences. There is scarcely ten miles of territory intervening between the lines of track in most of the northern and western states, and a mighty tonnage affeat upon our rivers, lakes and canals. Fifty milhous of people now and hereafter the mightiest nation the world has over known, will require more timber than has ever before been used by any civilization that has preceded the genera tion of men now bustling in this restless world. Think of the multitudinous uses of timber, calculate the immense quantity required to meet the vast consamption. Figures need not be given. To say twenty billion feet does not convey any impression except of an incomprehensible number, but it is given as the consumption of American tumber in 1880. Consider the uses of timber, the fifty millions of population in the United States, and estimate the value of timber twenty years from this date. Pine is not alone of value. Not a pine tree should be wasted, it is true, but it is equally true that he is a ruthless disregarder of the rights of posterity who needlessly and wantonly destroys an oak, an elm, a hemlock, an ash or a maple tree, or any other species of timber. The tide of development must rell northward over the pennsulas of Michigan and lay low her noble forests, but there need be no vandalism, no indifferent waste such as has marked the past. Be not in haste to denude the land. The hardwood of Michigan is to-day of more value than the pine, and it will increase in value as the years go by. The same is true of other states. The hemlock of every state where the tree grows is worthy of preservation; it is a useful tunber wood and its value in some of the states will increase five fold within as many years. Let the old refrain be taken up, "Woodman, spare that tree."

IMPORTANT DECISION.

An exchange reports a decision by the Court of Oueen bench, for Ontario, involving the right of a landlord to seize upon the property of a third party, temporarily upon his premises, for the payment of rent. The suit was one for damages by the owner of certain sawlogs, which had been taken to a saw-mill to be converted into lumber in due course of the business of the mill. The defendant was the landlor of the premises, and distrained upon these logs to satisfy his claim for rent against the tenants. The court held this distress illegal, and the logs exempt from any liability. The court further held that it made no difference that one of the tenants appeared to have an interest in the sawlogs jointly with the plaintiff. This decision is of considerable importance to the large class of Canadians interested directly and indirectly in the lumber business, and it is a matter for congratulation that the courts have been able to hold these goods exempt. Their liability to seizure for rent would introduce a considerable element of uncertainty into this kind of busi

SPARK ARRESTERS.

There have been many devices offered to the public for the purpose of arresting sparks from chimneys, but like many devices for arresting the progress of sparks in every day life, the old original plan seems to work the best. This embraces a wire screen or bonnet, made either permanent with an enlarged arm above the stack, or with a hinge joint on a flat opening at the top. This latter is but a modification of the close top of the former, which, if of a small enough mesh to hold cinders, is apt to become clogged after a time, and prove annoying. The hinged opening at the top obviates this, so long as the wire rope connection with the ground, used for opening and closing the trap, remains intact, and when this is broken it is no great trick to restore it. A patent device embracing an inclined shelf inside the stack, so arranged that emders removed from the direct influence of the upward deaft would fall of their own gravity upon the shelf, which is connected on the outside of the stack with a pipe or area sufficient to pass them to the ground, has been tried by many mill men, but has not met with sufficient favor to come into extended use. Probably the best system of arresting sparks is found in o enlarging the area of the chimney that while a good draft is obtained, the heat will not rush up with sufficient velocity to carry cinders to the top. A small stack just large enough to create the required draft under the boilers, is a most prolific source of danger, as the velocity of the current of heated air is sufficiently great to overcome the gravity of the cinders. Tall, brick stacks of sufficient area, seldom emit cinders of a size to be dangerous to surrounding property. Givo your stack a height and diameter exceeding the actual requirements of your grate surface, and you can find no more effective measure for arresting sparks, which, rising to a height where the current of air becoming somewhat weakened in its force can no longer overcome their gravity, fall into the ash pit at the rear of the arch. Confine the heated air to a small compass, and its force will invariably carry sparks or heavy cinders over the top of the stack .- Northwestern Lumberman.

SPEED OF CIRCULAR SAWS.

Nine thousand feet per minute, that is, nearly two miles per minute, for the rim of a circular saw to travel, may be laid down as a rule. For example, a saw 12 inches in diameter, 3 feet around the rim, 3.000 revolutions: 24 inches in diameter, or 6 feet around the rim, 1,500 revolutions; 3 feet in diameter, or 9 feet around the rim, 1,000 revolutions: 4 feet in diameter, or 12 feet around the rim, 750 revolutions; 5 feet in diameter, or 15 feet around the rim, 600 revolutions. Of course it is understood that the ring of the saw will run a little faster than this reckoning, on account of the circumference being more than three times as large as the diameter. The following table, which has been compiled as an authority on the subject, nearly covers the whole ground :-

Size of saw.	Revs. per mi
	4,500
	3,000
14 in	2,585
16 m	9,9-59
18 in	2,000
20 in	1,800
22 10	1,636
24 in	
20 In	
28 in	
30 in	
32 in	
34 111	
36 in	1,000
34 in	
40 in	
42 in	870
44 in	840
46 in	
15 in	750
50 in	
52 in	
64 fo	675
56 in	
58 in	
	600
62 in	
61 in	
66 in	
68 in	
70 in	
72 in	500
–Industrial World.	

HAUVARD'S PECTORAL BALSAN; a few doses relieves the most distressing cough, and a twenty-five cent bottle has cured many a sufferer from Asthma, Bronchitis, Croup, Influenza, Hoarseness and Soreness of the Chest. It is the grand specific for all throat and lung complaints leading to consumption.

WILSON'S ELECTRIC LIGHT.

It will be of interest to lumbermen and saw mill owners, who operate on a large scale, to learn that Mr. T. L. Wilson, of Hamilton, Ont., has invented an electric machine which affords t steady light at a small cost, and is of simple construction. Reference has already been made in the LUMBERMAN to the advantages which would accrue to river-drivers should they be able to use the electric light during the night in sorting logs, as often during the day the weather is unfavorable. Mr. Wilson's invention will doubtless be suitable, as it only require a twohorse power to run the apparatus, which could easily be carried from place to place. An exhibition of the light was given in Hamilton lately and is referred to as follows by the Times of that

"On approaching the building one was obliged to notice the bright illumination from the windowr, which made posters on the adjacent fences as legible as in daylight. Mr. Sanford, who has taken great interest in Mr. Wilson's experiments, contributing the funds necessary their carrying on, met the visitors and exhibited photographs printed by this electric light. The Times representative was able to read solid minion and nonpareil print without difficulty at a distance of twenty feet from the lamp. The apparatus is by no mean intricate in design, The motive power is an engine running at two horse power, and the electricity is transmitted to the lamp through copper wire. The burner is made of coke and molasses, the parts being held in position by a clock-work attachment, which works automatically. Mr. Sanford explained that the apparatus was about one-fifth the veight and could be manufactured at much less cost than any electric machine in New York. The light, including carbons, which consume at the rate of 13 inches per hour, and power from the engine, will cost about 2 cents per hour. One light like the one exhibited would suffice for a large floor of a warehouse or manufactory. By attaching the wire to a machine contrived for the purpose—and which occupies little space -about 85 per cent. of the original engine power can be utilized for any tannufacturing work, rendering the apparatus useful by day as well as by night. The inventor has labored long and faithfully to perfect his invention, and it is understood that a proposition to organize a joint stock company for the construction of the machines, etc., will be laid before the citizens of Hamilton at an early day."

COMMERCIAL VALUE OF WOODS.

Walnut, common..... culls Cherry, best quality, clear of hearts, large knots and shakes, Butternut, Whitewood. Chestnut, White Oak. White Ash Hickory, •• Rock Elm. Balm of Gilead. Birch, Black Oak .. Grey Oak, Black Ash. .. Maple. •• Beech, Soft Ehn.

CEDAR-HEMLOCK-TAMMRACK.-For railway ties from these woods the railway companies pay as high as from \$20 to \$30 per 100.

Really First-Class.

THE CANADA LUMBERMAN has changed hands, Mr. Begg having sold out his interest to Messrs. Toker & Co., who now issue that journal from their office in Peterborough. Under the new management the LUMBERMAN promises to be a really first class paper, if we may judge from the first number sent out by them.—Musicka Herald.

HUMBUG IN BUILDING.

There is a great deal of sham building in this country-building that is intended to catch the eye and give an appearance of solidity and hush which in reality it does not possess. Sometimes this kind of work is intentionally made, with a view to making cheap houses that will sell for a dear price, and sometimes it is furnished by the contractors on a contract, where they have engaged to put in good work but do not. Of course, where the owner sets out to build chean and flashy houses, there is no one to blame but himself. But when a man contracts for good work and in place of it gets sham work, he certainly has good cause for complaint. But in very many instances there are extenuating reasons, which, while not exactly exculpating these builders who violate their engagements, furnish them with a partial excuse for their actions One of the chief causes for this kind of unfaithful work rests in the system of competitive bidding on jobs. A person desires to build a house. and forthwith he gets half a dozen carpenters and contractors to bid against each other for the job. These men, thus competing against each other, are, in nine cases out of ten, induced to put in their bid at figures below what good work, or work according to the specifications, can be done for. The result is that the party taking the contract at such ruinous terms begins to "cut the corners" at once. Whenever he can slight the work and not be detected he does it. He furnishes, when he can, inferior and cheaper material than he should, and in every way possible tries to make up for the "cutting ced into rate," which by competition he w giving in order to obtain the work. When he comes to turn the house over to the owner, if the latter has not had experience in building, he is quite likely to accept it as a good job, or if he detects the "little game" of the contractor, a law suit generally ensues. We do not mean to say that carpenters, or builders, do not some. times willfully violate their contracts and cheat and deceive, when they are not induced to do so by competition. Unfortunately they often do.

Frequently poor work is put into building because the owners are too caroless or too ignorant to furnish the proper plans and specifications, and make them a part of the contract. Thus, the contract may name certain kinds of work, but omits to mention the quality of the lumber, or the paint, or the styles and kinds of hardware to be employed. As might be expected, the builder, insted of putting in lumber that should cost \$40 a thousand, contents himself in using that which costs but \$30, and so through the work, wherever anything is left to his judgment or discretion, it is likely that he will figure for his own interest.

What is the remedy? A very simple and sensible way to build a house is for the party so building, to just find out what kind of a house he wants. Then ascertain how he desires it finished in detail. If he is able, he would do well to employ a competent architect to draw his plans and furnish him with the speifications. Then ascertain as nearly as possible by inquiry and observation, what good labor is worth, after which, take his plans and specification to a reliable builder and let him make his bid, giving him to understand that good work would be required. In almost every instance, it will be safe to assert, reasonable figures will be made. We mean reasonable figures for good work, but not as close as figures would be envolved by a process of competitive bidding. Good work can. not be had for nothing, and a good house cannot be built without good work. The dearest of all kinds of labor is that slipshod kind of carpenter work, the evidences of which are left in so many of our houses. But a good, solid, substantial, well-made building can be erected at reasonable figures, and by men of limited experience in building, provided they employ honest builders and give them a chance to obtain a fair renumeration for their labor and time, without compelling them to resort to the tricks of the trade to get it -Industrial World.

On Sunday morning, April 17th, between one and two o'clock, a fire broke out in Hall & Brown's lumber yard at Berlin, and before it was subdued some \$300,000 worth of lumber was consumed. There was no insurance and the cause is unknown.