

**The Art of Sorting Lumber.**

People unacquainted with the lumber business usually think that it is the handling of a coarse, bulky commodity, that requires little knowledge of details, or skill in management. It is the common notion that any man can be a lumberman after a short experience. Surely the buying and selling of boards, scantling, timbers, shingles and lath must be a simple and easy matter. Such a business, in the common view, has no comparison, in detail and minutiae, to the dry goods, grocery or hardware trade. This opinion may have some application to the business of a small retail yard, at a railway station in a farming district, in which half a million feet of common lumber would be a large stock, and the list of sorts would not comprise more than a dozen. But when we come to one of the great wholesale yards, such as are to be found in this city, and other leading markets, the common notion is wide of the correct one. A wholesale yard has come to be the depository of a vast list of articles of wood, in which is embraced coarse and manufactured lumber, from a stick of 12x12 to a picket with an ornamental head on it, or a shingle with a hexagonal butt. If a yard price list that lies under the eye of the writer were to be thrust into the visual range of a dry goods merchant, he would be astonished at the multiplicity of articles named therein, and the wide divergence of value attached to them. He would make up his mind that a novice would have to receive a long and painstaking tuition before he could engage successfully in such a business.

Let us take a glance at the list in question. It embraces nearly 60 different classes of rough and dressed "wood goods," as the English say. Included in this classification are fully 900 different grades, sizes or styles of manufacture. In white, or soft pine flooring, there are 41 grades or items, with as many different prices. There are 13 grades of Norway flooring; 71 of hardwood flooring, including maple, red oak, white oak, walnut, cherry, ash and southern pine. Ship lap has a list of 22 items. There are patent sheathing and lath, soft and Norway pine partition, German siding, o. g. drop siding, soft pine ceiling, Norway ceiling, wainscoting, corrugated ceiling and well tubing, each with from one to twenty grades, sizes or descriptions. There are a dozen different makes of "fence rails"—not the kind that Indiana and Ohio farmers use, that are split out of logs, but fancy rails, that are priced at \$10 to \$40 a thousand, measured in lumber feet. There is a class of lumber denominated "saps," which comprises seven items; a style of lumber that is much esteemed at the east because it is clear and cheap, and just as good as any when inside and covered with paint. Stock boards, 10 and 12-inch, have 36 items on the list. Finishing lumber and thick uppers include nearly a hundred items. Panel stock has 20 grades; rough pine strips, 34; Norway, 12; pickets and palings, 16 sizes and grades; short lumber, rough, 42; car builders' stock, 32. Then, there are common and cull boards, Norway boards, common and cull fencing, and Norway fencing; mill culls, rough maple strips, timber, joists and scantling, each class with a numerous list. There is beveled corn cribbing, bridging and furring which the novice should know is not stuff with which to build bridges, or anything that pertains to contrivances taken from the backs of animals, but simply little sticks with which to brace joists in floors, and strips to nail lath on. In plain shingles there are 22 kinds and grades, and there are 14 descriptions of dimension and ornamental makes, with geometrical terms—squares, diamond, hexagon, octagon, circle and segment applied to them.

Enough has already been mentioned to bewilder the ordinary merchant; but the list further includes building paper, lath, battens, poplar cave troughs, sidewalk plank, porch post stock, turning timber, turned hitching and stable posts, cedar posts, etc.

All the different kinds of lumber are sold rough or dressed, as desired. Much of it has to be manufactured into stuff ready to be put into place in buildings, articles of use, fences, or what not. It can be easily seen that this involves a large and varied amount of mill work. Hence we find attached to this trade list a schedule of prices for dressing, making, kiln drying, etc. There is also a sash, door and blind list, with the customary discounts.

All the rough, dressed and manufactured material referred to in this list is offered for sale, at specified prices, by one house. The job is undertaken to supply any customer in the United States, with any item on the list, on short notice. It does not require a strong imagination to reach the conclusion that there can be no seeds in the wool, moss on the back, or hair on the teeth of the man or men who devise and maintain such a complex business as this. Though a wooden trade, there can be no wood in the head of the men who keep all these details in proper arrangement, so that there shall not only be no loss in the business, but handsome profit at the year's end.

There are several wholesale yards in this city, the stock of which takes a wide range, but perhaps the one referred to is

the most complete. The successful conduct of such a trade is enough to show that the lumber business can be made to employ the ablest and brightest mercantile faculty of the country. As the years pass, raw material diminishes in supply, and forest resources have to be gathered from a widening reach of territory; as the necessities and tastes of community shall require the use of a greater variety of woods, the wholesale collector and distributor of stocks will become more and more a man of extended and minute knowledge pertaining to his vocation.—*Northwestern Lumberman.*

**Tension in Saws.**

Tension is the principle in hammering a high speeded saw. In the lower speed the tension is not such an item, and many saws are now running that require no tension at all only the natural stiffness of the steel. This term tension is new to many saw hammerers, and a great many so-called experts and instructors in hammering saws do not understand the proper relation of the tension in a high speeded saw. They can make the average saw do good work. In this way many men get up their "rep." and are ready to tackle anything in the shape of a saw, knowing that the saw requires to be opened in the centre to the required speed. This may be done and yet the saw won't go. The unequal tension is corrected, but of no avail. I have seen such men hammer a high speeded saw until the centre would dish back and forth as it should apparently, and he never did make that saw run, hammering it half a dozen times, opening and stiffening it to the extreme both ways, trying to get at the limit and the saw got worse. Remember this man could correct unequal tension fairly. The trouble was the saw was not opened in the proper relation to the action of centrifugal force. This is something that nine-tenths of the saw hammerers do not understand, that a saw can be hammered to be as stiff at any required speed as the metal in the plate will allow. They do not know the extent of the centrifugal strain on the rim. How many know the maximum or "vice versa" line in a circular saw? We often see men hammer a saw in segments from centre to rim, no matter what the condition of the saw is. The first thing is to sledge hammer the saw for a while to "liven up the steel," and then go about to regulate it to the speed. By the time this is done there has been ten times as much work done as was necessary, and the saw will soon be in worse condition than ever, as the tight and loose lines bring about more buckles from rim to center than all his hammering can get out; the rim at regular intervals gradually assumes the shape of the letter S.

Years of experience in average speed does not make a man proficient for a speed of 12,000 feet rim speed. The trouble with such men is this, as above stated, they can make an average saw go very well, have hammered saws that so many have failed on, that the man naturally is led to believe that he is chief. He can talk about the saw makers and what he can learn them, knows it all and don't care to learn any more, but talk to him about a saw running on 12 and 14-inch feed, and you will catch his jack, and he won't believe it then, says it's some newspaper talk, and a trick. As a man of this kind remarked to me, it is "scalping," the saw being allowed to rub the log while giggling, to display the feed marks, etc.

Saw makers are not very old on heavy feeds. The best saw maker in the United States to-day claimed 15 years ago that no saw could be made to stand the strain of a 10-inch feed in a 12-inch cut. At the Centennial in 1876, 10½-inch feed was all that was aimed at. The same saw cut 21½-inch feed at the World's Fair, at New Orleans in 1885. Why could not 21½ inch feed be cut just as well 11 years ago as now? The steel in the saw to-day is undoubtedly the same as then. This shows that there has been a wonderful increase in the capacity of the circular saw, all brought about in the hammering of it, getting the tension in the exact relation to the centrifugal force, and feed strain.

Saws are sometimes bursted on heavy feed, but my experience has been that when a saw was adapted to the work and in a first-class condition, they have never been broken by heavy feeds. There are but very few men who can put a saw in that condition, and it being so far above the calibre of the average saw hammerer, it is folly to attempt to explain here the sensitive and most essential parts of a perfect saw. Perfection has not yet been attained by any man, but the difference between a botch and a good job on a circular saw, comes very near demonstrating perfection.

The adjustment of a saw is more essential than the most vital part of a watch. Two saws may be fixed up and appear so near alike that the average man can not tell which is in the best condition, and yet one saw will cut twice as much lumber as the other and equally as good. My limited experience has taught me that the best results are obtained by not hammering near the center or rim of a saw.—*Foreman, in Woodworker.*

—There is very little doing just now in the Quebec market.

**What is Forestry?**

What is forestry? It is the same thing as agriculture—a business. The difference is only in the kind of crop and in the manner of treating the crop. It is the production of a wood crop we are after. This is the crop which grows, or can be made to grow, on those parts of the farm which are useless for all other crops. It is a slow growing crop, to be sure, but it grows while you are asleep, and you need put it in the ground but once, where it will thrive without further care for many years; and, if properly started, it needs no hoeing, no cultivating, no worrying about the weather. And when you come to reap it, it will prove to yield a profit from ground that would otherwise have been left not only unproductive, but unsightly in addition.

If only for the looks of it a piece of young timber thriftily growing enhances the value of the farm. Therefore plant the unsightly waste places to trees, remove those ugly spots from the farm that spoils its good looks. It costs but little more than an occasional day of enjoyable work.

Don't figure on the profit of sticks that you are going to cut; there is profit indirectly accruing from such planting, which defies all strict financial calculation, besides your own satisfaction which will surely reflect from such work beyond any direct money gain, though this will not be lacking, either, in proper time. It has been proved over and over again that a wood-lot will sell the farm—if sold it must be—at a better price than it would have brought without it.

And you who are the happy owner of a wood-lot treat it as the goose that lays the golden eggs; the eggs will soon be high in price, the goose is worth caring for! If you cut, don't cut the good trees only and leave the bad ones to spoil the looks of the lot and to injure the young growth, that would be better off if the gnarly old fellow over head did not stand in its way with shade and drip. Always give some light and room to the young folks!

Forestry means more than tree planting; it is the art of managing a wood crop so that it will reproduce itself spontaneously by the seed from old trees and afterwards helping the young growth to make the best timber in the shortest time. Nature will reproduce the forest and grow timber without care if allowed by man, but she takes time, and time is money—at least to a careful manager.

Then use your old moments in improving your crop; the axe, too, is a cultivator—in judicious hands.—*B. F. Fernow, Chief of Forestry Division U. S. Department of Agriculture.*

**A Curious Bill-Head.**

A correspondant of the *Antiquary* says that recently, in turning over a bundle of London tradesman's accounts of nearly a couple of centuries ago, he came across the following, which is certainly curious, and seems to be a sort of cross between a bill-head and a book-plate. The plate-mark has a margin of half an inch all round, the full size of the sheet itself being 6½ by 4¼ inches.

WILLIAM GARDNER at the Sign of the one Cane-Chair, on the South Side of St. Pauls-Church, London, maketh and selleth Cane-Chairs, Couches, and Cane-Sashes at reasonable Rates. Of dry Wood.

At the back of this is Mr. Gardner's account, as follows:—

Mr. Douglas bill for cheres Nov. ye 6, 1709.

	£.	s.	d.
8 walnut Cheres, fine moulding, the finest			
Caine of all, at 12s. ....	4	16	0
2 Elbow Cheres suitable at 15s. ....		1	10
	in all		
	£6	6	0

Reced Nov. ye 8 1709, of Mr. Douglas the full contents of this bill and all demands, I say Reced by me

WM. GARDNER.

Gardner must have been a celebrated chair-maker, from the fact of the goods having been sent all the way to Newcastle on-Tyne, where the Mr. Douglas referred to in his bill resided.

**They Paid for the Mistake.**

Northwestern Lumberman.

A Bangor Me., lumber dealer recovered 10 cents a thousand and on 800,000 lath from the Western Union Telegraph Co., because a telegraphic offer to a Philadelphia dealer had been delivered making the price 10 cents less than that written by the sender. The waiving clause in the telegraph blank, releasing the company's liability for error or non-delivery, and the ground that plaintiff was not bound by the erroneous message, furnished the strong points in the company's defense. The supreme judicial court of Maine decided against the company on both grounds, holding that the printed stipulation did not bind the sender, but was void, because the public good demanded the use of care and diligence by the company, and that the sender of the message was bound by it in the form delivered, but that he had remedy against the company.