

PART III. LUMBER AND ITS MANUFACTURE

By ANSON A. GARD.

SQUARES.

Around every saw mill there is always a lot of odds and ends of walnut to be found, which can be cut into squares to good profit, since they cost but the time and labor of sawing them.

Squares must be in a manner perfect, free from sap and knots, and cut true and full thickness. If, however, a small knot or a little sap appear on the corners, or where it will turn off, it will pass, but there will always be a question as to how little or how much will be allowed.

They should always be made a little longer than the length to be used, in order that the ends can be squared.

All short lengths and sizes under 4 inches should be bundled and tied with tarred twine, as the time it takes at the mill where labor is cheap is far more than made up where it costs 25 to 40 cents an hour to handle them one at a time.

NEWELS.

In cutting newels, never leave the heart in any piece, with the impression that it can be bored out and serve as well as thought it had been clear. It is possible you may find a buyer, but the chances are that it will take so long to find him that your newels will be worthless from splitting by the time he is found.

SIZES OF SQUARES.

Some sized squares are used the same lengths in all markets, while again other sizes are peculiar to particular markets.

NEW YORK SIZES.

Chair and Lounge Stock.

Table listing various square sizes for chair and lounge stock, including dimensions like 1 1/2 x 1 1/2, 1 1/2 x 1 1/4, etc.

BALUSTERS.

Walnut, Cherry, Ash.

Table listing square sizes for balusters, including dimensions like 1 1/2 x 1 1/2, 1 1/2 x 1 1/4, etc.

Any multiple of the above lengths will do if allowance is made for cutting off to the proper length.

TABLE LEOS.

Walnut, Cherry, Ash.

Table listing square sizes for leos, including dimensions like 4x4, 5x5, 6x6, etc.

NEWELS.

Walnut, Cherry, Ash, Poplar.

Table listing square sizes for newels, including dimensions like 4x4, 5x5, 6x6, etc.

PHILADELPHIA SIZES.

This market differs from New York in two particulars. The balusters run one fourth 3/2 in. and three fourths 3/6 in., and will take newel posts 4 feet long; i. e., it does not object to them that length, while New York does.

SIZES FOR THE ENGLISH MARKET.

The following are the prevailing sizes called for in the English markets:

- List of square sizes for the English market: 2 x 2 x 16 1/2 and 28, 2 1/4 x 2 1/4 x 10 1/2, 16 1/2 and 28, etc.

The demand for the first three sizes is always good, the next size is fair and for the others I have followed each by about the per cent. of the demand for that particular size.

In sawing, bear in mind that these lengths or any multiples will be taken. The longer the square can be cut the better, and the larger the more valuable it is.

SIZES FOR THE GERMAN MARKET.

This market is a distributing point for Russia and all the surrounding countries of Germany.

The following are the prevailing sizes:

- List of square sizes for the German market: 1 1/2 x 1 1/2 x 28 and 32, 2 x 2 x 28, 30, 32 and 36, etc.

Very little demand for the first two sizes, and good demand for the 2 1/2 and the 3. The best lengths are 30 and 32 in.

GARD'S DECIMAL SQUARE RULE.

The following rule will be found indispensable to all mill men who cut out squares, and to yard dealers who sell them. By means of the decimal, much time and work are saved.

EXPLANATION OF THE TABLE.

In the left hand column will be found the length in inches, or further down the length in feet, and at the top column you will find the size of the square, and beneath the decimal of each length. When you wish to find the contents of any number of square you multiply this number by the decimal opposite the length of the squares and point off as many figures as there are decimals. The amount before the decimal point will be the contents in feet.

EXAMPLE.

How many feet are there in 655 pieces 3x3x30? The number opposite this dimension will be found to be 1.875, i. e., one foot and eight hundred and seventy-five one thousandth of a foot. Multiply first by the whole foot—655 feet, then by the decimal .875=573.125; mark of the 125 and you have 573. 655 and 573, contents, 1,228 feet. If the decimal begin with a 0, as .092, you multiply by the 92, but mark off three figures just the same.

THE SAWDUST DIFFICULTY.

The Halifax Nova Scotian, a usually well-informed journal, has the following on the sawdust question, which we consider worthy of reproduction:

It is quite impossible to avoid a lively interest in the subject which is now engaging so much attention from parties in this province. It is not a matter which can be settled as yet in any scientific or mathematical manner, but it is one which is capable of discussion and will admit of much more light than has ever yet been thrown upon it.

First, let us see what it is all about? The minister of marine and fisheries, who, by the way, is a young inexperienced and rash person, has undertaken to put in force the law which enables the government to compel mill owners to stop putting sawdust in rivers or else close their mills.

The very question at this moment is, does the necessity of any such enforcement now exist? Has anything developed in the meantime which changes the position of matters? The onus is upon the minister of marine to establish this.

In the consideration of the rights of mill owners on the one side, and the interests of river fisheries on the other, much doubt and perplexity seem to exist, even among those who would most likely be informed. At this, so much to be regarded, namely, that the two interests involved are the most important of any in the country. The trade returns for the year ending 30th June, 1887, show that the total export of the products of the forest amounted to \$20,484,000, and of the products of the sea to \$6,875,000.

Table showing export figures for fisheries, forest products, and agricultural products.

It will be seen from this table that fish and lumber are the great staple products of this province, and together constitute more than three-fifths of the total exports.

Nothing should be done to injure either. On the contrary both should be protected. But it must be borne in mind in this connection that the fisheries which formed this great export were not river fisheries. It is not likely that the total produce of the inland fisheries amounted to anything of any consequence at all.

But it is alleged in defence of the crusade which has just been inaugurated in behalf of river fisheries, that the sawdust question affects adversely not merely the fish who usually inhabit the rivers and go up there to spawn but that it is the presence of numerous fish in our rivers which draws the fish to our shores. If this be so, it is an important argument. But we are bound to say we never seen this satisfactorily demonstrated.

Then, again, there are many persons who claim that sawdust in rivers is not fatally injurious to fish, and statistics are given to show that no greater falling off has occurred in the catch of fish in streams on which saw mills have been situated, and those which have been free from sawdust altogether.

But we come back now to the most vital question: "Where does the balance of interest lie?" The putting in force of the regulations which Mr. Charles H. Tupper has undertaken to make is bound to have a disastrous effect upon the lumbering industry of this country. Will it have a corresponding advantageous effect upon the fishing industry of the province? Who feels certain that if all the saw mills in Nova Scotia were closed to-morrow and kept closed for the next five years there would be any great boom in our river fisheries?

Again, will some one be good enough to inform us who has been clamoring for the shutting down of saw mills? Has this demand come from men actually engaged in the

Large table with multiple columns showing decimal square rule calculations for various square sizes and lengths.