

2½x7 in. from the lower ports are quoted at £5 5s. f.o.b., and 5ths at £4 5s., but we believe that sellers are prepared to accept somewhat less for fair lines. Even at these figures, and calculating freight at 20s. to the Surrey Commercial Docks, there is little temptation for London buyers to operate, no profit being noticeable on 4th battens, even at £6, c.i.f., if the receivers have to incur the cost of landing the goods. 5th battens would naturally yield a fair margin, but these cannot be bought without the other qualities; so that buyers have no inducement to purchase for forward delivery, until they can discover some signs of better times. Some profit is certainly attached to sales of parcels for outside delivery, but this is a branch of trade which can only be pursued to a limited extent, although it has assumed considerable dimensions during the last and present seasons.

Whitewood is easier and battens from the lower ports can be purchased readily at £4 10s., which figure cannot now be obtained for specifications containing a large proportion of 2½x7. Both 6½ in. and 6 in. remain scarce, and the price for these dimensions has consequently been very slightly modified. We understand that the Swedes have sold the major part of their 3x9 white on the continent, but the prices obtained have not transpired except in a few instances.

Messrs. Foy, Morgan & Co. on Wednesday had the advantage of following on a month of singular quietude in public auctions, and it was therefore not much matter for surprise that buyers mustered in strong force at the Baltic this week. In addition to the Petersburg goods there was the bright pine, in handy sizes and widths, and of good quality, to tempt bidding, and as far as the prices go we consider the cargo of Quebec bright 2 in., per York City, being very well sold; 1st, broads reached £22 5s., and 1½, also wide stuff, selling at £19 15s. and £20 a couple of lots of dry, per same ship, going up to £20 10s.

The timber per Nippon, at £3 12s. 6d. (one lot fetched another half crown), realized quite as much as expected, for it would not be easy to say what the timber is most suited for.

As long as the raw wood can be obtained at the present rates, we think very little business will be done in the other descriptions. The advantage on the side of the bundle trade is that for cheap work it can go with battens and low-priced wood right on to the works, and to small householders this is a highly important consideration.

There is a general impression amongst the trade that the log timber to the London market will shortly be almost nil, on account of the large quantity of thick, wide planks sent to the market which timber in the log used to supply; but we heard the same opinion expressed 20 years ago, and yet the dock ponds are well supplied. The dock authorities say it is that department of the docks which pays the worst, but we can hardly see how that can be. There is no expense on the stuff; it lies at rent for a considerable time, and requires no particular looking after; but the company must know best. That the trade, however, will die out we do not believe, and the thousands of sizes which would have to be shipped to supplant it none of the present generation will live to see.

#### GLASGOW.

The *Timber Trades Journal* of June 26th says:—Trade here continues quiet. A public sale of log timber took place at Greenock a few days ago, but there was not a large attendance, and of the goods offered only a small proportion changed hands, transactions being confined to some lots of yellow pine; other woods put up, oak, elm, etc., were withdrawn, as bids were under the figures required by exposé: note of prices realized is appended.

The new season's imports of Quebec log timber now at hand will, it may be expected, give some animation to the market. The first of the Quebec timber fleet has just arrived at Port Glasgow, after a voyage of 32 days, particulars of cargo not reported in time to be included in accompanying import list.

Arrivals at Glasgow for the past week consist largely of American oak planks in parcels per steam liners, and include also an import of deals per steamer from Quebec and Montreal,

the total of Canadian deals landed at Glasgow this season now amounting to 64,376 pieces, at this time last year the total was 70,070 pieces and in 1884 91,850 pieces.

At Greenock the imports for the week comprise a cargo of pitch pine and one of greenheart. The arrivals of pitch pine at Clyde ports this year (represented by a carrying tonnage of 17,677 tons) are slightly in excess of last year's at this time; and for same period in 1884 the tonnage was 20,632 tons. Arrivals of North of Europe wood goods at Grangemouth continue very light, the carrying tonnage for the past four weeks being 3,610 tons, as against 15,001 tons for corresponding period 1885, and 9,545 tons same period 1884.

#### AUCTION SALE.

On 17th inst., at Greenock, Messrs. Singleton, Dunn & Co., brokers:—  
Quebec yellow pine timber—  
40 c. ft. avg. per log 1s. 0½d. & 1s. per c. ft.  
35 " " 11½d. "  
Quebec red pine—  
25 c. ft. avg. per log 10d. "  
20 " " 9½d. "

#### QUEBEC.

A despatch from Quebec says:—The timber market continues very dull and sales are made with considerable difficulty. One old raft of 1882 timber, containing small waney and square pine of about 44 feet, was sold at 14 cents, while a choice Kippewa raft of 53 feet with a small portion of waney board, 21 inch, has been closed at 25 cents per foot. For red pine there is some inquiry for shipping parcels which are worth 20 cents to 25 cents for good timber. No sales in hardwoods are reported.

The number of sea-going vessels entered inwards at the Quebec custom house from the opening of navigation up to yesterday is 228. The clearances to the same date including steamers, are 158, leaving 70 vessels in port and outports.

#### SUPERVISOR OF CULLEERS' OFFICE

Comparative statement of timber, masts, b-w-sprits, spars, staves, etc., measured and culled to date, at Quebec:—

	1884.	1885.	1886.
Waney White Pine	614,299	303,028	630,108
White Pine.....	627,910	681,864	397,781
Red Pine.....	27,196	12,905	130,766
Oak.....	320,641	691,650	398,537
Elm.....	226,120	266,317	150,565
Ash.....	95,238	80,770	28,237
Wood.....	205	....	80
1. Spruce.....	811	1,004	87
Tamarac.....	1,965	36	2,340
Birch and Maple..	178,495	264,979	153,769
Masts and Bowspits	— pcs	— pcs	— pcs
Spars.....	32 pcs	— pcs	— pcs
Std Staves.....	16,642.22	39,033.28	19,823
W. I. Staves....	69,811.25	64,211.17	81,216
Std Staves.....	0.0213	48.50.22	....

JAMES PATTON,  
Supervisor of Cullers.

Quebec, 2nd July, 1886.

#### RAFTS ARRIVED.

JUNE 30—P. McLaren, white pine, ash, &c., Ontario, St. Lawrence Dock Co.'s cove.  
JULY 5—Thomas Buck, elm, Michigan, New Liverpool cove.  
JULY 6—Barnet & Mackie, white and red pine, Nipissing, Cape Rouge.  
JULY 6—J. Bustall & Co., oak, ash, elm, &c., Ontario, Woodfield cove.  
JULY 7—Cook & Gibbons, elm, ash, etc., Ontario, St. Michael's cove.  
T. McLaren, white and red pine, Ontario, St. Lawrence Wharf and Dock Co.'s cove.

#### TIMBER MARKET REPORT.

Messrs. Alfred Dobell & Co., in their Liverpool circular of July 1st say:—We have to report another dull month in our trade and with the present political disturbance any improvement could hardly be looked for. Still, all things considered, the consumption during June has been fully up to what was expected. The sales by private have been:—Spruce deals—St. John, N. B., at £5 17s 6d and £5 15s per standard, ex quay; Bridgewater, N. S., at £5 12s 6d per standard, ex quay. Birch—Picton, about 16 inches average, at 11½d per foot, ex quay; Prince Edward's Island, about 16 inches

average, at 10½d per foot, ex quay. Pitch Pine—Pensacola, 10 feet sawn on private terms. Oak planks—Waggon sizes, 1st quality, at about 1s 10d per foot, ex quay. Pencil cedar—Florida wood at from 3s to 3s 3d per foot. The sales by auction have been:—Spruce deals—Several parcels of St. John, N. B., were offered early in the month, but the bulk were withdrawn, the sales being limited to a balance lot ex C. S. Parnell, from St. John, N. B. Pitch pine—A cargo from Pensacola 35 feet sawn, was offered but the bulk of the 11 and 12 inch wood was withdrawn, a cargo from Darien, 35 feet sawn, was offered at the same time, but was withdrawn with the exception of a single lot. Teak planks—A parcel from Rangoon averaging about £13 10s per load.

#### EDUCATE THE MIND AS WELL AS THE HAND.

Every man who is engaged in any kind of mechanical labor should cultivate studious and observant habits. There is scarcely description of knowledge but which he will at some time have use for, especially if he ever hopes to rise above the position of ordinary mechanical labor. No man can ever hope to attain distinction as a mechanic unless he educates his mind as well as his hands.

One of the most important acquirements of a mechanic is that he should be able to readily and lucidly convey ideas to another. There are indeed many men who while otherwise competent to direct others have failed from lack of this faculty, or have refused good positions because they know their weakness in this respect. Perhaps as many foremen fail from this cause as from any other. Undoubtedly, this faculty is one to be acquired; it is not one, if there are such, that is born with a man. Every man who works at a mechanical business should labor in the direction of acquiring the habit of concisely expressing his ideas, making this a part of his mechanical education. Talking of such subjects will help a man; writing of them is excellent practice.

A good mechanical eye is also a most essential requisite in a good mechanic. No one can ever attain distinction as a mechanic unless he is able to detect ordinary imperfections at sight, so that he can see if things are out of plumb, out of level, out of square and out of proper shape, and unless he can also detect disproportioned or ill-shaped patterns. This is a great mechanical attainment, and one which can be readily attained by any ordinary person. Of course there are defective eyes as there are other defective organs; the speech, for instance is sometimes defective, but the eye is susceptible of the same training as any organ. The muscles, the voice, the sense of hearing, all require training. Consider how the artist must train the organ of sight in order to detect the slightest imperfection in shade, color, proportion, shape, expression, etc. Not one blacksmith in five ever attains the art of hammering square, yet it is very essential in his occupation. It is simply because he allows himself to get into a careless habit; a little training and care is all that is necessary for success.

But in these cases the fact is, that eye is not half as much at fault as the heedless mind. Some carpenters acquire the careless habit of using a try square every time they plane of a shaving, in place of giving their minds right to their business and properly training their eyes, and unless they cultivate this power of the eye they will always be at journey work. Look at the well-trained blacksmith; he goes across the shop, picks up the horse's foot, takes a squint, returns to his anvil, forges the shoe and it exactly fits the foot. Contrast him with the bungler who looks at the foot, then forges the shoe, then fits the foot to it, often to the ruin of a fine horse. Now, the fault lies in ever allowing himself to put a shoe on that is not in proper shape for the foot; he should determine to make the shoe fit the foot instead of the foot fitting the shoe, and he should follow it up until the object is accomplished.

A very good way to discipline the mechanical eye is to first measure an inch with the eye, then prove it with the rule, then measure a half inch, then an eighth, and so on, and you will soon be able to discover at a glance the difference between a twelfth and a sixteenth of an

inch; then go to 3 inches, 6, 12, and so on. Some call this guessing; there is no guess work about it. It is measuring with the mind and eye. Acquire the habit of criticizing for imperfections every piece of work that you see; do everything as nearly as you can without measuring (or spoiling it), or as nearly as you can trust the eye with its present training. If you cannot see things mechanically do not blame the eye for it, it is no more to blame than the mouth is because we cannot read, or the fingers because we cannot write. A person may write a very good hand with the eyes closed, the mind, of course, directing the fingers. The eye is necessary, however, to detect imperfections. Every occupation in life requires a mechanically trained eye, and we should realize, more than we do, the great importance of properly training that organ.—*Mining and Scientific Press.*

#### WOOD-WORKING PATENTS.

The following list of patents relating to the wood-working interests granted by the U. S. patent office, June 29, 1886, is specially reported by Franklin H. Hough, solicitor of American and foreign patents 925 F street, N. W. Washington, D. C., who will furnish copies of patents for 25 cents each.

344,580—Lathe—W. W. Hubbard, Philadelphia, Pa.  
344,469—Saw gauge—W. H. Wilson, Westfield, N. Y.  
344,355—Saw mill dog—A. Delaney & J. M. Bond, Richmond Va.  
344,356—Saw mill dog—A. Delaney & J. M. Bond, Richmond Va.  
344,366—Saw mill set works—C. Esplin, Minneapolis, Minn.  
344,365—Saw setting device—H. C. Hart, Unionville, Conn.  
344,568—Sawing machine, circular—E. S. Collins, Meadville, Pa.  
PATENTS ISSUED JULY 12.  
344,926—Lathe, automatic—F. M. Stevens, New York, N. Y.  
345,110—Mortising, boring, &c.—R. T. White, Boston, Mass.  
344,867—Planing and matching machine—C. F. Ritchel, Bridgeport, Conn.  
345,868—Mortising machine—M. Rothschild, Shamokin, Pa.  
345,256—Saw frame—H. L. Pratt, Brooklyn, N. Y.  
345,121—Saw swaging machine—M. Covel, Chicago, Ill.  
345,071—Saw table gauge—J. H. Palm, Minneapolis, Minn.  
345,070—Sawing machine, circular—J. H. Palm, Minneapolis, Minn.

#### PLANTING TREES FOR TIMBER.

Prof. Lazenby, of Carroll University, says: To make timber plentiful, and to render our climate more genial, we must reclothe all rugged broken land and rocky crests, in fact every acre that is not cultivated, or is cultivated at a loss, with valuable forest trees.

First—All ravines and steep hill-sides, all land too rocky to be thoroughly cleared of stone and mowed, should be devoted to trees.

Second—Protecting belts of trees should be planted wherever buildings, orchards, gardens, etc., are exposed to cold, sweeping winds.

Third—The banks of streams, ponds, open ditches, etc., should be planted with trees that they will be protected from abrasion by floods and rapid currents.

Fourth—All public roads should be belted by graceful, stately trees.

We should preserve, improve and extend our existing forests by keeping up a constant succession of young growing trees of the best varieties. To do this it is necessary:

First—To allow no stock to run in woodlots for purpose of forage. This should be a rule inflexible and relentless.

Second—Young growths in forests should be thinned moderately and judiciously. Worthless varieties should be cut out and the valuable sorts should be thinned up so that they will grow tall, forming trunk rather than branches.

Third—Timber should be cut with intelligent reference to future growth. Valuable trees that you wish to propagate should be cut in the spring. Those that you wish to exterminate should be cut in August.