

LIVERPOOL STOCKS.

No from the *Timber Trades Journal* the following Comparative Table showing Stock of Timber and Deals in Liverpool on Dec. 1st 1884 and 1885, and also the Consumption for the month of Nov. 1884 and 1885:—

	Stock, Dec. 1st, 1884.	Stock, Dec. 1st, 1885	Consumption for the month of Nov. 1884.	Consumption for the month of Nov. 1885.
Quebec Square Pine.....	315,000 ft.	250,000 ft.	144,000 ft.	151,000 ft.
Waney Board.....	455,000 "	455,000 "	4,000 "	4,000 "
St. John Pine.....	26,000 "	28,000 "	12,000 "	8,000 "
Other Ports Pine.....	70,000 "	81,000 "	1,000 "	1,000 "
Red Pine.....	57,000 "	31,000 "	3,000 "	91,000 "
Pitch Pine, Sawed.....	602,000 "	419,000 "	48,000 "	110,000 "
Pitch Pine, Sawed.....	305,000 "	562,000 "	127,000 "	8,000 "
Planks.....	61,000 "	90,000 "	4,000 "	1,000 "
Dantle, &c., Fir.....	59,000 "	59,000 "	4,000 "	13,000 "
Sweden and Norway Fir.....	63,000 "	65,000 "	7,000 "	78,000 "
Oak, Canadian and American.....	277,000 "	333,000 "	32,000 "	71,000 "
Planks.....	177,000 "	204,000 "	9,000 "	0,000 "
Balio.....	0,000 "	5,000 "	15,000 "	14,000 "
Elm.....	22,000 "	45,000 "	9,000 "	7,000 "
Ash.....	41,000 "	26,000 "	20,000 "	64,000 "
Birch.....	64,000 "	102,000 "	30,000 "	9,000 "
East India Teak.....	36,000 "	172,000 "	3,000 "	2,000 "
Greenheart.....	28,000 "	115,000 "	0,000 stds.	0,000 stds.
N. B. & N. S. Spruce Deals.....	27,674 stds.	21,411 stds.	6,727 "	9,056 "
Quebec Pine Deals & boards.....	1,028 "	440 "	3,756 "	3,259 "
Do Spruce.....	671 "	7,761 "	779 "	878 "
Balio Deals, &c.....	3,895 "	4,553 "	89 "	18 "
Balio Boards.....	31 "	825 "	766 "	324 "
Prepared Flooring.....	2,059 "	1,624 "		

TIMBER FOR SINGLE TREES

The *Whedwright* says:—It is exceedingly important that buggy singletrees should be sawed properly, especially if they have been turned green. If the sawing is not done properly the ends will be all kinds of sizes and shapes. In fact not the ends only but the whole singletree will shrink in seasoning so as to make a variety of shapes and sizes. Many of them will be ill-shaped, scarcely resembling the original design. The grain should be uniform, that is, it should cross each singletree the same way. If this point is not attended to the shrinkage tending so much more to decrease the circle of the grain than to contract the grain will have results known to the trade. It is better to have the grain cross each singletree in the same direction even if they are to be seasoned before turning. We do not attempt to say they will be stronger through the arrangement referred to, but it will certainly prevent much warping and twisting if the grain is either square across, what is better known as bastard, or if the grain crosses the singletree thin way up and down.

Singletrees for buggies and carriages, especially second-growth timber, should not be kiln-dried to season it. Yet it is necessary to use a kiln for a day or two unless these pieces can be loosely cross-piled in the open air protected from the sun and rain. If the temperature is not summer heat, or the timber has been cut some little time, it will stain, giving the all-white wood a reddish cast so strongly resembling the red or heart wood as to be so classified by the inexperienced. One or two days heat will not injure the fibre, but to thoroughly season the singletree in a kiln, with dry heat, will surely deteriorate the strength. The older and brasher the fibre the greater the injury, especially if overheated a little. The injury is sustained even if from a young and thrifty second-growth tree, but possessing superior vitality, it is less noticeable. In the rapid processes for seasoning lumber, steam or other means of artificial dampening is always adapted. This is practically impossible with a class of goods where the moisture would stain and injure the wood. Kiln drying will not injure the fibre if the heat is kept at a mild summer heat, but with this temperature it would require several weeks, whereas the modern way seems to be to take the timber from the log and ship it out bone dry in one week's time. This quick seasoning simply means to crust over the outside and bake the exterior until its life is seriously injured, often almost totally destroyed.

Singletrees are graded into three qualities—second growth, mixed second growth, and forest. The mixed second growth is a half-red and white or all red, but second growth many of them more serviceable than the all white. The forest is a common grade of timber not thrifty enough to be classified with the two better grades. Some manufacturers grade their singletrees second-growth, select forest, and forest; the second growth grade will take the half-red and white and the choicest of all-red that are strictly second growth. The select

forest differs from the mixed second growth only in taking in what the name implies, a "select forest," but not second growth. In classifying as second growth, select forest and forest, the distinction is not made as clearly and justly as in substituting mixed second growth for the select forest. Selecting the best of the forest can but weaken the forest grade. The mixed second growth are sold at a price dividing the difference between the second growth and forest. When turned from green timber the warp, twisting and springing form no small per cent. of the whole. The percentage is greater with small, young, tough, thrifty growth than with the larger trees and an ordinary growth. This percentage is farther increased by careless sawing. The grain crossing the singletree diagonally makes a very undesirable singletree, especially if turned green. These singletrees that have sprung out of shape in seasoning need not be thrown away, but can be straightened by using the singletree as a lever with the fulcrum at the centre of the point needed to be straightened. With a quick pressure exert sufficient strength to force the singletree to or a little beyond a straight line, and the wood will retain this shape. If badly sprung and a very tough fibre it will be necessary to first steam the singletrees. This discolors the wood somewhat and takes the additional time. Singletrees and spokes that are practically dry will spring to some extent if stored or exposed to an unnatural or excessive heat.

Waggon-makers or repairers can save their stock from worms by oiling with linseed oil. Singletrees, doubletrees, neck-yokes, spokes and cross-bars that are of white hickory and are kept in stock for a year or more will be eaten by worms or kept in a dark place or protected as above. Coal and kerosene oil are good also, and the expense of applying is but little. Linseed oil is preferable, as it acts to some extent as a wood filler, filling the pores, thus aiding the painting which follows in its proper place. A boy can take a rag dipped in the oil and go over a large number of pieces in a day's time or a rat can be used long enough to admit of several dozen at a time being put in and picked out one at a time, and put where they can drip for one or two minutes. The expense of this is much less than those who have not had the experience might imagine, and far less than the loss of stock by worms. Some manufacturers oil all their white hickory stock before shipping, it being applied with a belt similar to other belting processes. The flat part of the buggy singletree is left unbelted by some factories to give the carriage-maker more timber to work on. This is a good plan aside from the unfinished look of the goods. But it will never do to ignore look even if they do cost something.

JONATHAN BOICE, of Grand Rapids, Mich., lately purchased of O. P. Pillsbury & Co., a tract of pine in Roscommon county, same state, estimated to cut 50,000,000 feet, at \$210,000. The logs will go into Muskegon river, and be floated to Muskegon for manufacture.

MAINE TIMBER.

Lumbering operations have been prosecuted vigorously for years in Maine and the impression is quite general that the forests of the state are quite denuded of merchantable timber. But year after year large amounts of logs are run down the stream, and we believe the Penobscot has contributed about 300,000,000 feet to the general stock this year. The hardy lumbermen of that state are again in the woods lifting up their axes against the trees, and a paragraph in the *Bangor Commercial* states that "there will be more lumber cut on the south branch of the Dead river the coming winter than ever before in one winter." The names of a number of lumbermen and the amounts they will cut are given, and the *Commercial* adds:—"One can judge of the density of our Maine forests, by considering that this whole amount of lumber, viz.: From 15,000,000 to 19,000,000 feet, will be cut from a strip about 12 miles long and seven miles wide." Michigan contains forests which are capable of turning out a good deal more lumber from an equal extent of territory, but it cannot be denied that the Dead river country is a pretty good lumbering district, considering that Maine has been extensively lumbered for 50 or 60 years. If Michigan shall be capable of doing as well after she has been undergoing the process so long, it will be very fortunate for those who inhabit the state a quarter of century hence. It will be able to do so if care is taken not to destroy the young pines, and the advance of agriculture does not result in bringing under cultivation too great an extent of forest land. Maine has been favored by having a large amount of forest land that could not be profitably cultivated and the forests, left to nature, have been rehabilitated. Michigan has some, but not so great an extent of such land; it might be fortunate if she had more.—*Lumberman's Gazette.*

QUEBEC SHIPPING INTERESTS.

A comparative statement of the number and tonnage of sailing vessels and steamers which entered at Quebec, inwards and outwards for the years ending December 31st, 1884 and 1885, which was prepared by Mr. L. G. Belleau, is published by the *Chronicle*. The exhibit for 1885 shows a slight increase in the volume of business done when compared with the figures of the previous year. In 1885, sixteen more vessels visited Quebec than in the preceding shipping season. The total amount of tonnage in 1884, was 646,365 against 667,112 in 1885, making a difference in the way of increase of 747 tons. In 1834, on the contrary, the decrease over the returns of 1883 was 139,407.

In British ships arriving in Quebec, we may note a total of 306 in the year lately closed, as against 317 in the year 1884,—a loss of 11 ships. From the United States, Italy, Belgium and Austria we had no ships last year, but there were sent us one from France, 28 from the German Empire, 239 from Norway and Sweden, one from Denmark, three from Russia, one from Holland, and one from the Argentine Republic. The increase in the number of Norwegian and Swedish ships arriving here in 1885, as compared with the number returned in 1884, was 35; there is also an increase in the tonnage from the German Empire, of one vessel over that of the previous year. Russia, which sent us four ships in 1884, sent us only three in the season just closed. A decrease may also be mentioned in the tonnage from France, which sent three vessels last year, and only one this year,—and Denmark which sent us three in 1884 and but one in 1885. The number of men employed in 1884 was 17,080, as against 15,990 in 1885,—a decrease of 1,090 men.

Mr. Belleau's statistics also show the date of the opening of navigation at the port of Quebec in each year since 1830 to the present time, as well as the date when navigation closed. In 1885, the first Montreal steamer of the season arrived here on the 7th of May, while vessels from sea reached this port on the 5th May. The last ships sailed for sea on the 21st of November. The return showing the number of vessels entered inwards and outwards at this port from 1849 to 1885, inclusive, is instructive and worthy of attention. In 1885, inwards 580; outwards, 479.

WHEN TO BLOW OUT.

Our *Rothsay* correspondent propounds this question: "Is it advisable to blow out a boiler under 35 or 40 pounds pressure?" and doubtless engineers throughout the State will give sufficient answers. It is to be remembered first of all that the steam boiler is subject to expansion and contraction, and under an established and known margin of safety both these operations, incidental to the working of a boiler, will regulate themselves without giving anxiety to those in charge. Every engineer should have definite information regarding, not only the average capabilities in ordinary service of the appliances he uses, but also of whatever extra strain they will bear or energy they may be required to exert, under unusual circumstances. Thus it may be frequently found necessary to blow out mud from the drum of a boiler, and this must sometimes be done without reference to steam pressure. It is done with from 30 to 45 pounds pressure. An accumulation of mud in the drums is to be avoided; unless removed it will dry up and form a crust or cake which will prove injurious. Experienced engineers advise blowing out under these circumstances. On the other hand, when it is intended to shut down for the purpose of cleaning out the boiler, the practice of blowing out under such pressure should be avoided. It should never be forgotten that a steam-boiler requires careful handling, and a careful engineer would not blow out under excessive pressure, because he ought to know that when a boiler is subjected to sudden contraction it will be injured to a more or less extent. No absolute rule can be made; the thing to do is to know all that can be known and follow one's best judgment.—*Wood and Iron.*

A TIMBER LADEN SHIP ON FIRE

QUEBEC, Dec. 11.—Captain Simpson, of the ship *Coringa*, from London, at New York, reports on November 17th at noon in lat. 43.57, long. 33 20, sighted a bark in the northward, showing signals of distress; lay to until he ran down to us, proving to be the bark *Nora* Hansen, from Quebec for London with deals, 28 days out. She was dismasted, had seven feet of water in the hold; the pumps were broken, and the captain wished to be taken off as the ship was becoming water-logged. The crew, consisting of 18 men all told, came off in their own boats. I sent men back in the boat and boarded the bark to get all the provisions we could from her, and then as night was coming on and the wind and sea increasing, set fire to the wreck and proceeded on our course. The bark *Nora*, Capt. Hansen, cleared at the Quebec Custom House on the 19th October for London with the following cargo by Messrs. Bryant, Powis & Bryant: 7,206 bright pine deals, 1,320 spruce deal ends, 22,023 spruce deals. The *Nora* was 958 tons burden, built in 1857 at Alton, Germany, and hailed from Drammen, Norway, where she was owned by G. Samuelson and others, and partly insured.

The Greatest Inventor

In reply to "A Pupil," we should certainly say by far the most prolific inventor in connection with wood-working machinery was the late Sir S. Benthall, whose patent specifications of 1791 and 1793 are marvels of their kind, and either describe or foreshadow nearly all the wood-working operations in vogue at the present day; in fact several of his inventions have been patented again during the last twenty years. In point of fact there is little doubt that Sir Samuel Benthall was a most remarkable man, although he does not by any means occupy that "niche in the temple of fame" to which his inventive genius undoubtedly entitled him.—*Timber Trades Journal.*

LATE figures in the *Toronto Globe* make it appear that receipts of lumber at that point this year had been 11,000,000 feet less than in 1884. A correspondent to the same paper explains the apparent deficiency by the fact that receipts this year for local consumption, not being reported with receipts for shipment, have been sufficient to raise the total to about that of last year.