from Fredrikstadt and elsowhere, may be shortly expected to supplement our present stock in the quarters where it is weakest.

The almost impassable state of the roads, consequent upon the recent heavy fall of snow and the succeeding frosts, has seriously affected the returns made by the Surrey Commercial Dock Co. of the deliveries for last week, as the following comparative statement clearly shows

1886. 1885. 1884. Deals, etc. (stds) 1,409 Flooring " . . . 246 3,383 2.549 498 1,500 Timber (loads)...... 605

Mesars. Churchill & Sim's three days' auction Fach day has has been the event of the week. gathered a large assemblage of buyers, all of whom were evidently deeply interested in watching the result of this "trial" auction. The room, although seldom crowded, was always full, and seats near the front were not easy to get at any time during the course of the sale. The catalogue itself, comprising several lots of almost every description of deals and flooring, was peculiarly suited to test the range of values likely to hold during the spring, at least, of 1886.

So far as an improvement in prices is concerned, those who hoped for better things, it seems. have had to bear another disappointment. To look at this week's catalogue, and then back to those dealt with at the end of November, euables us to arrive at no other conclusion than that the market has been virtually unaffected by the entorced repose which everyone thought would be of such benefit to it. In the prices now under consideration we discover the least possible variation from the figures current in November: indeed, we may forget the break there has been in the auctions, and continue to trace the tendencies then observable as though we were taking up the thread of the discourse at only a week's, instead of a month's, interval. Battens and common deals are as weak as they ever were, while flooring in third quality shows a tendency to improvement that is not shared by seconds. There is, however, this gratifying feature about the figures made for best quality goods of all sorts, that a fairly good standard was uniformly made, as there were plenty of buyers for all that was offered. Flooring, as a general rule, commanded the best results.

The most important lines in the auction were the various Petersburg stocks, of which the bulk were battens. Archangel found fair favor Next in importance to the Petersburgs, come the shipments from the Finnish ports, which again comprise a long string of batten sizes. These may be dismissed with the remark that 7 in. and 8 in. fluctuated between £6, £6 5s., and Mi 10s., with other sizes in proportion.

Variety is essentially the crowning feature of the Swedish stocks, and in the prices realized we have grounds partly for satisfaction and partly for regret, although unfortunately the jatter is likely to be the predominating feeling. Fifth deals were apparently in sufficient request to save the price falling below £6 15s., at which a variety of marks found ready buyers. This, in itself, may not be much to say, but it is so far satisfactory in that, as will be remembered. not a few lots of this description were sold as low as £6 5s, in the December autions.

Spruce, pine and red pine we offered in larger quantities than usual, and with satisfactory results. Third Saguenay apruce, 3x9 in. 12 feets, at £6 15s., 11 feets at £6 10s and enris at 26 5s, show a much better result than do most of the Baltic white deals with which, to a great extent, it comes into competition. Third regular pine planks, Saguenay, at £315s., reads much like the autumn price; only we should have thought the present partial scarcity would have tempted buyers to pay a little more now that the supplies are closed against them for some time to come. The red pine deals submitted were chiefly in the lower qualities, and for them £6 10s was a fair value. We have soon many better parcels also than the Quebec firsts, of which the plank made £11 15a. The pitch pine deals, ex Telefoi, fetched some wretched prices, although the circumstance that they were a stowage lot and of very undesirable specification is accountable for a good deal.

A good result attended the sale of Oddessa oak boards, and also of the Fredrikstadt slating battens, in both cases a fair advance N. Y.

being established on last prices. Quebec birch, 16 inch to 18 inch, made 67s 6d, which seems to show that notwithstanding the recent heavy import, buyers are not deterred from paying a good price for fair quality wood.

Flooring, as we have remarked, has the reputation of being the best sold The freshly im ported cargo per Pickwick excited a keen competition, which is attributed as well to its fine condition as to the suitability of the dimensions to the requirements of the market at the present The few 2rds that were offered realized prices which confirm us in believing that this quality is to enjoy a slight temporary scarcity, accompanied by a good demand. One of the best pieces of the day was that made for the 3x7 inch 3rd yellow ox Pickwick, and atthough 7s for this lot may mayor of a lucky chance, it shows at least an auxiety to possess the lot on the part of many buyers present. Third \$x7 inch yellow matching-that old offender-war stimulated in one instance to an advance of Gi per square, after which f inch matching was quick to follow suit. Narrow matching, in some cases, improved slightly, but we do not lay much stress on this fact. Inch white went exceedingly well, 1sts making 8s 9d and 2nds 7s 9d, the latter figure being also secured by a lot of DDD. Almost all 1st yellow flooring and matching commanded good figures, and this not only in 7 inch but as well in 6 inch and 51 inch, which is more unusual. For the 1st ax7 inch and 3x7 inch, t g.b , ex Pickwick 8s was made, while the 12 inch scored 13e 3d, and the 1 inch 10s 3d. In Inch-2nds, although 7 inch and 6h fof which there were some good lines in the Pickwick) fell flat at 8s and 3d, there is ample cause for satisfaction that 1x6 inch AHA should secure 8s 3d. A precisely similar remark obtains in the case of the a inch 2nd yellow, Ge 9d for 6 inch and 6s 6d for 5h inch being much more inspiriting than 7s and 7s 3d for 7 inch. In white 3 inch, although there are only a tew lots to judge by, prices are also firm when let Christiania 63 inch can make 7s and 2nd 6 inch as much as 63 3d and 5s 6d. The last named is an excellent price, and falls also the cargo ex Pickwick. From the various odd lots of flooring submitted we select the 1x7 inch EA & Co. 3rd Dram, from Gs 6d as evidence of the improvement in 3rd quality, and the JD & Co 2x6 inch yellow flooring at 7e, with the fx7 inch white matching at 5z 9d, as instances of really good prices. The Kjorbreck 14x64 inch yellow also shows a considerable advance on the last price made.

WINNIPEG.

The Commercial says :- There is no improvement to note in this branch. Trade still holds in about the same inactive state as during the previous week, and no immediate improvement is considered likely for at least a few weeks to come, or anything like activity until a near approach to the time when building operations can again be resumed.

WOOD-WORKING PATENTS.

The following list of patents relating to the wood-working interests, granted by the United States Patent Office, January 12th, 1886, is specially reported by Franklyn H. Hough. solicitor of American and Foreign patents, 925 F. Street, N. W., Washingston, D. C.

331,330-Log turner-H. T. Basim, Decatur ville. Ohio.

354,324 - Plane-J. Woods, Columbia, Tenn. 334,175 - Saw guide, band - W. Kratzer, Allentown, Pa.

334,285-Saw mill feed mechanism-T. J. Reamy, Nashville, Tenn.

\$34,284-Saw mill head block-T. J. Reamy, Nashville, Tenn.

334,241-Saw tooth, insertible-A. Krieter, Columbus, Ohio, 334,303-Saw tooth, insertible-J. S. Swank

& W. Dages, Big Tres, Cal. 334,297- Sawing machine-D. W. Smith,

Long Lake, Mich. 334,141-Sawing machine, circular-J. F. Welsh, Brooklyn, N. Y.

PATENTS ISSUED JAN. 19

334,538-Lathe-W. J. Muncaster, Cumberland, Maryland.

334 567-Saw-G. N. Clemson, Middletown,

334,664 -Saw mill feed carriage - G. M. MANAGEMENT OF BOILER FIRES. Hinkley, Milwaukee, Wis.

334,730- Saws, machine for jointing and dressing circular-C. Scoch, Truckee, Cal.

334,663-Sawing machine-G M. Hinkley, Milwaukee, Wis.

334,674-Sawing machine-S. P. Dress Pleasant Mount, Mo.

PATENTL ISSUED JAN. 26.

334,893 - Chuck, fathe-E. Pement Esmond. Dakota. 331 997 -Edger, gang-S. S. Vall & J. Solli

day. St. Louis, Mo. 335,090 - Hoop pole sawing machine -1'.

Powell, Williamsport, Pa 335 000-Hoop splitting machine H. Weit zel. Ithaca, Wis.

334 940-Lumber drier-ti. H. Derby, Somer rillo, Mass.

334,943 - Plane-A. Doll, Lena, Ill.

334 818-Saw guide, band S. Stephens & D B. Handson. Indianapolis, Ind.

331 785-Saw until band II Bennama, South Evanston, Ill.

334,515-Saw mill dog-J. B. Davis, Munroe ville, Ind.

THE Saginaw Courser sente mot a prominent lumberman of Ohio in that city last week and asked of the outlook for the lumber business, d was told that a rather better trade than was had last year was expected. The gentleman said in some parts the business had not been very satisfactory, especially in Ohio where the small yards had made but little during the past year. He said they were not stocking up much yet that in fact the heavy dealers in Cleveland and Toledo were not making an effort to sell as the believed prices must advance.

WANT A LUMBER EXCHANGE.

Agitation for the establishment of a lumber exchange in New York city is going forward. The Times notes the movement as follows : -

"One hundred and fifty firms carry on the lumber business in New York, and one of thom estimates the amount of capital invested at more than \$10,000,000. The persons who compose these firms are in the aggregate worth much more than three times this sum, and if the real lumber market of New York is not so large as Chicago's there is more wealth back of it. For years the New York bunber dealers have tried in vain to establish an exchange. The reason an exchange is desired by them is that by surveying and classifying a system of proper prices may be put upon lumber. Such a system of prices has been adopted in all the principal lumber markets of America except New York, where inspection is not standard, but private, each firm omploying its own agent. The lumbermen who want an exchange contend that with its influence for good a set of regulations alike just to the men in the south, west, and northwest as well as to the New York dealer to whom he sells, will be taken up and stood by. They want, as one of them said vesterday. regulations which will assure an inspection return properly verified, that it will carry with it evidence of the value of material needed at home and the certificates of both value and integrity that is needed abroad. As it is, how ever, all lumber depends absolutely on the inspector. If mistakes are made, there are some of the New York dealers who wish for a proper exchange to deal postice all around."

"The eastern editors of the Northwestern Lumberman published at Chicago, say that not s week passes that complaints are not received from shippers of hardwood to the New York There is no head or tail to the lummarket ber inspection here,' they say, 'and it is this lack of open and authorized inspection that is bringing the New York market into bad repute among mill men all over the country." element of the trade which opposes the exchange does so, it is asserted, on the ground that it is not necessary to the needs of the trade, and that, so far as the system of inspection is concerned, the reputation of the firm to which lumber is shipped should be sufficient authority for the honesty of its inspection, The committee which had the matter in charge yesterday adopted a constitution and by-laws. The Legislature will be asked to authorize lawful inspectors."

The Hartford Steam Boiler Inspection & Insurance company's bulletin has a timely and instructive artice, which exhibits in a striking manner the serious results which may follow the use of very good feed water when a strong course of practice is followed in the managem nt. The facts are as follows :

Five new boilers all burned and bagged inside of three weeks after they were first started up. The water used was of very good qualitymaking but little scale or sediment, and the the accidents were due entirely to the manner in which the fires were managed. The burns all o curred within a few inches of the front heads of the boilers, and all occurred at the same hour of the day, although on different days.

It was customary to bank the fires at noon. or rather to fill the furnace full of soft coal, and have the fire door open instead of closing the damper partially, to check the formation of steam. This allowed a current of cold air to enter above the fuel and impinge on the fire shoet. This, of course, would check the circ lation, and what little sediment the water held in suspension, and which would circulate with the water as long as steam being rapidly generated, would naturally be deposited on the bottom of the boiler near the front end,

Upon starting the works at one o'clock, it was the practice to run a slice bar through the thick layer of coal put on an hour or so before, and which had in the meantime become thoroughly coked, and break it up thoroughly, then close the fire door. This intense heat thus auddenly applied to the boiler burned the sediment on to the fire sheets before a brisk circulation of the water could be established, which would have gradually picked it up and prevent el any damage. But after it was once baked on the shell it could not be removed by the circulating water and the over-heating, bagging, and burning of the iron followed naturally in. a short time.

The bag, or pocket, shown in the illustration is about four inches deep, 15 inches broad at; the base, and at the lowest point the iron is thoroughly burned out. The thickness of the layer of acdiment on the interior is only about 1-16 of an inch. Upon careful examination by the company's inspector, a change in practice was made, and no further trouble has occurred for several years.

Another similar case occurred at about the same time in another locality, where, in a battery of 14 boilers, three of them "came down" at once. This latter case was due to the peculis method of "baking" the fires, and was stopped, as was the first one, by a change in practice.

Too much care can not be exercised in cases similar to the above in the method of firing the boilers. Fires should be started and steam raised gradually, that circulation may be estable lished in a proper manner. This will not only prevent such accidents as have been describer, but will also prevent undue strains on different portions of the shells, due to the differences of temperature. Many boilers have undoubtedly been ruined by injudicious firing, and the fault attributed to some defect in the boiler, when in reality none existed.

MOUNTAIN MAHOGANY

In Nevada there is a peculiar wood known as mountain inalogany. The tive does not grow large. A tree with a trunk a foot in diameter is much above the average. When dry the ! word is about as hard as boxwood, and being of a very fine grain might no doubt be used for the same puriose. It is of a rich, red colorand very heavy. When well seasoned it would? be a fine material for the wood-carver. In the early days it was used in making boxes for for shafting, and in a few instances for shoes and dies in quartz battery. Used a fuel it creates intense heat. It burns with a blaze as long as ordinary wood would last, and then is found (almost unchanged in ferm) convert to a charcoal that lasts about twice as long as ordinary wood. For fuel it stands much higher then any other kind of wood; indeed, a cord of .t. always brings the same price as a top of coal. The only objection to it as a fuel is that it, croates such an intense heat as to burn out stoves more rapidly than ceal, however bad,