

MORE TIMBER IN ALASKA.

The San Francisco *Alta*, of a late date, contained the following: "Some time during last year the Corwin left this port, under instructions from the Government, with a number of presents for the natives on the Siberian coast, who had rendered assistance to the unfortunate Rodgers. Lieut. Stoney, who was one of the officers of the Corwin on this trip, in making explorations, discovered an unknown river which he named the Putnam river. He explored it for about 40 miles, and upon his return to San Francisco reported his discovery to the navy department at Washington, upon which information the Ounalaaska, which arrived at this port on Saturday last, was placed at his disposal, in order that a fuller exploration might be made. The Ounalaaska sailed from the bay of San Francisco on Saturday, April 13, of this year, arriving at Hathaw Inlet July 10, and left there September 7 to ascend the Putnam. The banks of this river are heavily timbered with birch and pine. Two hundred miles up the Putnam the party found a beautiful valley, which contained timber and many wild flowers, similar to those grown in the United States, and at a distance of 400 miles the river took the shape of rapids, and small boats had to be used. At that distance wild strawberries and salmon berries were found. Indians inhabit the country thereabout, who are clean, intelligent, peaceable and honest. They use birch boats, and baskets to bail water, and are more advanced in civilization than those who live near the sea. At 300 miles up the Putnam good coal beds were found, and traces of gold. At a distance of 500 miles Lieut. Stoney found the source of his discovery in the form of a lake, as clear as crystal, far on top of a mountain. The natives in this portion of the country had never seen a white man before, and were much frightened, the women taking to the bushes at the sight of the explorers, and it was only through the medium of presents being thrown to them that they were induced to come near the boats. No accidents occurred to the Ounalaaska nor her occupants during the voyage, and the exception of a few heavy gales met with, the officers express themselves as having had a rather enjoyable trip."

HINTS FOR CLEANING BOILERS.

The Hartford Steam Boiler Inspection and Insurance Co., Hartford, Conn., in its monthly journal, *The Locomotive*, has the following to say concerning the cleaning of steam boilers: Following the application of any boiler-purger or other substance for loosening scale or deposit upon the shell, heads or flues of a steam boiler, special care and attention should be given to cleaning out the boiler with a prompt removal of such loose fragments as may have become detached and fallen down. These particles, if not removed, are often swept about by the various currents within the boiler, and collecting in a conglomerate mass upon some part of the fire surface, prevent access of water to that particular part, and thereby it is overheated and is bulged or bagged as it is sometimes called—often inflicting a dangerous injury to the boiler and requiring a considerable outlay for new sheets, a patch or perhaps other expensive repairs.

In the use of soda and other preparations used for the removal of boiler incrustations, that are soluble in water, a separate vessel may be provided suitably connected to the feed pipe, so that the preparation, in its proper proportions as recommended, may be first dissolved, and when properly prepared fed into the boiler. When there is a heater the solvent may be prepared and emptied into that. Log-wood or oak chips, leather clippings and many other waste products of a manufacturing establishment that contain some useful ingredients as tannin, soda, or starch, may often be used advantageously when they are recommended and their use directed by an inspector, otherwise serious difficulties may result, perhaps endanger the safety of the boiler.

We should not have a great deal of sympathy for the man who, declining to avail himself of the services and advice of a physician, ruined himself by dosing with all sorts of nostrums of which he was ignorant, but such a man at the

worst can but ruin himself; while another, who persists in dosing his boiler may not only lose his own life, but he may sacrifice many other lives in the same foolish way. We know of an instance in which a party who had some condemned bacon in his store house which he thought to use advantageously in cleaning and lubricating his boiler, he having somewhere read that grease was an excellent thing for the purpose. As he described it afterwards, the boiler nearly turned inside out, and he fondly hopes he may live long enough to get even with the man who recommended it to him. Another case was that of a fireman, whose duty it was, under the direction of the engineer, to fire and keep clean a battery of boilers, who, happening to hear some one of his mates say that oil was an excellent thing for softening scale, thought to make a trial of it on his own account. So, one Sunday when cleaning out his boiler he went through the shops connected with the establishment and gathered up the refuse oil and grease from various drip pans, securing in this way two or three gallons, which he poured into one of the boilers and afterwards filled it with water. Soon after steam was got up the fire-sheets became bagged and beautifully corrugated and leaked like a sieve.

In boilers under our supervision we have used crude petroleum a great many times for the purpose of loosening lime-scale and with the most satisfactory results. We don't approve of the use of grease, and we deem the application of animal oils or fat to the interior of a boiler for that purpose as very hazardous. As a rule, when a boiler is in service, a systematic daily charge of a proper solvent graduated to the capacity of the boiler will be found more efficacious than a charge at longer intervals, and it is less likely to cause foaming and kindred difficulties. An important matter sometimes overlooked is the need of regular times for cleaning and the preparation which should be made for it.

When about to put a boiler out of service for a thorough cleaning it will be found an excellent plan to let the boiler cool off gradually and the pressure fall slowly until it has reached about five pounds, when the safety valve may be raised and the remainder blown off. Run off the water and relieve the hand hole when the scale will be found much softened and easily detached, while the deposit can be readily washed off with a hose.

Blowing down a boiler between the limits of high and low water, or in other words between the upper and lower gauge-cocks is often very beneficial, and assists materially in freeing it from the ill-effects of scum and other impurities. If, however, this blowing down is not intelligently done there is a probability of great waste and serious loss. For, in blowing out good water at the temperature of the steam pressure, and replacing it by other water perhaps of no better quality at a much lower temperature of the feed there is a great loss of heat and consequent waste of fuel. Blowing down a boiler, can, however, under no circumstances be depended upon to thoroughly clean it and remove loose fragments of scale and much of the deposit commonly found. This can only be done by a systematic, periodical washing out at intervals to be determined by the circumstances of the case.

THE NEW "STAVE-SHEET" BARREL.

We paid a visit a short time since to 24, Botolph Lane, the temporary office of the patentees, to see a new method of barrel-making, and as we hear that a factory on the river-side is about to be started for the manufacture of the stave-sheet barrel, we now give some particulars respecting it.

The novelty of the invention, as the term "stave-sheet" implies, consists in making the body or cylinder of the barrel in a flat sheet, which is subsequently formed into a barrel by the aid of a simple and inexpensive apparatus worked by a manual power. The barrel in the flat sheet, of course, occupies very little room, and as the operations of jointing the ends of the stave sheet and fixing the heads are very quickly performed, it will be seen that this feature may be of great advantage to those who have to store any large quantity of empties,

especially as the barrels are easily returned to the flat sheet after use, and consequently may always be stored in this manner. The most important element, however, in the invention is that it enables the production of a very cheap and merchantable-looking barrel, whilst, owing to the method employed in making the stave-sheet, various descriptions of barrels are obtained, meeting special trade requirements. The barrels are all cylindrical in shape, and of any size, and samples are shown with staves of from 3-16 in. to 3 in. thick. Those with the stouter staves are iron hoops, and so as to facilitate the rolling, guiding, and up ending, they are provided with a broad wooden hoop around the centre, which appears effectually to produce the results obtained from the bouge of the ordinary barrel. This renders these barrels available for the carriage of heavy goods, such as cement, chemicals, fish, &c., as they are thus quite easy to handle.

There is one description of the stave-sheet barrel which we particularly noticed by reason of its essentially novel construction. It has the staves placed apart, and may be termed the crate-barrel. It is intended for the carriage of fish, game, fruit, vegetables, and other perishable articles, as when stowed it permits of a greater ventilation, than can be obtained with any square package. This barrel, like the others, may also be re-flattened at any time for convenience of storage as an "empty."

Although the samples made up to the present are intended for dry goods, still such close jointing is obtained that the barrels may be used to hold articles scarcely coming under that category, and it is consequently intended to make a trial stave-sheet cask to hold liquids. If this is accomplished, a surprisingly cheap wet cask will be obtained; but it remains to be seen if the saving in cost will to any great extent lead to the discarding of the old familiar bouge cask, though it is noticeable there is a very general tendency to diminish the bouge as much as possible, as by so doing a saving is effected, not only in material but in freightage. A special interest that this invention may have for the trade is that it is likely to create a new outlet for a large quantity of waste timber, a 2 in. stave being, if anything, preferred to a wider one. The invention has also received protection abroad.—*Timber Trades Journal*.

DELIVERY CARGOES.

At a meeting of the Liverpool Timber Trade Association, held at the Canada Dock, Liverpool, on Nov. 4th, a discussion arose upon the various wordings of wood charters, with special reference to the manner in which the cargo shall be delivered to and by the ship. The custom here has been based upon the procedure carried out under the old charters, made for the conveyance of Canadian or Colonial woods, whereby the cargo (with the exception of such hewn or sawn timber which can only be drawn from the port by horse-power) shall be landed on the quay and there stacked at the expense of the ship. This has been the established custom from the earliest times, but of recent years innovations have been made in this custom, not from within the trade here; but from charterers outside this port, hence when a vessel has arrived with a charter-party not in conformity with the Liverpool custom, disagreeable results follow as a matter of course.

It is needless to point out in detail instances of the manner in which these arise, but the decision at which the Committee has arrived will commend itself to all concerned, since its object is to put all charters upon a uniform and harmonious basis.

The following is an extract from a record of the proceedings:—

It having been brought before the notice of a Committee of this Association that there is a clause in some wood charters reading, "The cargo to be brought to and taken from alongside ship at charterers' risk and expense," or "The cargo to be brought to and taken from ship's board at charterers' risk and expense," which has given rise to misunderstandings and disputes resulting in some cases in litigation, it was resolved in order to prevent disputes the members of our trade be recommended not to adopt any form of charter-party containing either of the above clauses, but that instead the following

be substituted, which has for many years been printed in charter-parties: "That the usual custom of the wood trade of each port be observed by each party when not otherwise specially expressed." It was further resolved that a copy of this resolution be sent to the timber merchants, brokers, shippers and others interested.—*Timber Trades Journal*.

INVENTION OF SAWS.

The saw was, it is said, invented by Dredalus, according to Pliny, but Apollodorus says the inventor was Telus. It is stated that the latter, having found the jawbone of a snake, employed to cut through a piece of wood, and then formed an instrument of iron like it. Beecher says saw mills were invented in the 17th century; but this is not so, it appears, for they were erected in Mederia in 1420, at Breslau in 1427. Norway had the first saw mill in 1530. The Bishop of Ely, ambassador from Mary of England to the Court of Rome, describes a saw mill there in 1563. In England, saw mills had at first the same fate with printing in Turkey, the crane in Strasbourg, etc.; the attempts to introduce them were violently opposed, and one erected by a Dutchman in 1663 was forced to be abandoned.—*Engineer*.

TIMES IN THE STATES.

Since 1861, at the outbreak of the civil war, to the present time, twenty-three years, there have been but five really prosperous years as people generally regard years of prosperity, or, as they say, "good times." The other seventeen years have been characterized by dull markets, slow and unprofitable sales, liquidation, bankruptcy, unemployed labor, and distress. For about three years after the close of the war there was prosperity, high prices, and abundant employment; then came a decline that lasted several years, until 1873, when there was a collapse and seven long years of hard rubbing to get along, and much distress. It was the era of tramps, bread riots, strikes, and general disorder. In 1879 times began to be a little easier, and in 1880 there was a big crop, good prices, and a boom. It lasted two years, and then there was another decline, shrinkage of values, and distress. This year the pressure has been felt more seriously than since it first began in 1882. We call attention to the comparative fewness of prosperous years as a matter to cause surprise. Though only a little more than one one fifth of the time during the past twenty-three or twenty-four years has been what can be called prosperous, the country at large has prospered and progressed nevertheless. There is much humbug in a so-called boom. The prosperity that it represents is largely fictitious. If the civilized world could ever get down to an even gait in industry and trade it would be better. There is but one mitigation in a boom, and that is in the demand for labor which it creates. In a boom even tramps can find a job, if they choose. But the way our industries are now organized the first intimation of hard times is sure to throw thousands out of employment.—*Northwestern Lumberman*.

The Wausau, Wis., mills, owned by nine companies and firms, will have cut at the close of this season 104,000,000 feet of lumber, of which 52,000,000 feet will be left over. The total number of men employed is 890. The boom received 113,000,000 feet of logs of which 104,000,000 were delivered.

Poor, despised hemlock is receiving more attention than ever before. Even in Wisconsin and Michigan men have held that none but a pine tree was of any value are now speaking in low tones about the future of hemlock. It will have a future, gentlemen, and the sooner you recognize it the better off you will be.—*Northwestern Lumberman*.

"It Knocks the Spots."

and everything in the nature of eruptions, blotches, pimples, ulcers, scrofulous humors, and incipient consumption, which is nothing more or less than scrofula of the lungs, completely out of the system. It stimulates and invigorates the liver, tones up the stomach, regulates the bowels, purges the blood, and builds up the weak places of the body. It is a purely vegetable compound, and will do more than is claimed for it. We refer to Dr. Pierce's Golden Medical Discovery.