☞ Reported expressly for the Scientific American, from the Patent Office Records. Patentees will find it for their interest to have their inventions illustrated in the Scientific American, as it has by far a larger circulation than any other journal of its class in America, and is the only source to which the public are accustomed to refer for the latest improvements. No charge is made except for the execution of the engravings, which belong to the patentee after publication.

LIST OF PATENT CLAIMS

Issued from the United States Patent Office

FOR THE WEEK ENDING DECEMBER 23, 1851.

To Wm. Ball, of Chicopee, Mass., for improvements in Pumps for elevating water mixed with mineral substances.

I claim the improvement by which the waste auriferous or earthy water, that leaks out of the shaft hole of the case, is saved and returned into the body of the case, and the wear of the shaft hole of the chamber prevented, the said improvement, consisting in the chamber, the wheel, and the passage, as combined together connected with the case and shaft of the fan wheel, and made to operate substantially as specified.

To Wm. L. Bass, of Boston, Mass., for improvement in Chronometric Locks.

I claim the manner of disengaging the drop lever from the notch of the bolt, from the outside of the partition when the clock is stopped, and preventing the same from being effected when the clock is in motion by means of the lifting screw in combination with the forked lever, swinging loop, and ratchet wheel, substantially in the manner described.

To Newell Wyllys, of South Glastenbury, Conn., assignor to Charles Collins, & N. Wyllys, of Hartford, Ct., for improved machine for making Leather Tubes.

I claim, first, the method of forming the blanks or sheets of the proper size and form for tubes, from leather or other suitable material, by means of the movable and stationary nippers and inclined knife, or the equivalents thereof, operating automatically, substantially as set forth.

Second, I claim the method of forming flexible tubes from prepared sheets or blanks, by means of fingers, clamps, and cement, or their equivalents, acting substantially as set forth, to bring the edges of the sheet into contact and to unite the same.

Third, I claim combining in a single machine, the operations of forming the leather or other material, into blanks, bringing the edges of the same into contact, and uniting them, so as to form a tube at a single operation, substantially as set forth.

Fourth, I claim the clamp by means of which the material is held and upon which it is formed into a tube, constructed and operating in such manner that it shall, in addition to its movements towards the other clamp, also have a longitudinal movement to withdraw from the finished tube, substantially as described.

Fifth, I claim the combination of the reciprocating diverging fingers with the reciprocating converging plates, or their equivalents, by whose action the fingers are made to seize the sheet of material, substantially as set forth.

Sixth, I claim the method of coating the edge of the sheet with cement by means of a roller or its equivalent, which receives the cement and applies it to the edge to be cemented, substantially as set forth.

Seventh, in combination with a clamp or its equivalent for supporting the edges of the sheet of material to be united, I claim a reciprocating pressing iron, actuated substantially as set forth, to press the edges together, and to set the cement.

To Perry G. Gardiner, of New York City, for Rotary Swaging Machines.

I claim the compressing, drawing, swaging, or working into shape, wrought iron car wheels and other metallic discs or swedges, suitably shaped, one of which is forced towards the other, while it, at the same time, revolves on its own centre, its axis of revolution being the same as that of the disc which is acted upon, the other die being either stationary, or having a revolving motion in an opposite direction to that of the first mentioned die, and with the same axis of revolution, the said two dies or swedges, operating substantially as described, and being moved by any competent arrangement of machinery, substantially as described.

To Julius Hotchkiss, of Waterbury, Conn., assignor to the Hotchkiss & Merriman Manufacturing Company, of same place.

I claim the fastening of those different parts of a suspender to each other, which require a permanent fastening by a metallic clasp or clamp, substantially in the manner described.

To Willis Humiston, of Troy, N. Y., for improvement in Candle-Making Apparatus.

I claim the employment of gripers for griping the wicks, drawing and suspending the candles on the frame above the moulds, by means of spring bearings by which the gripers are securely held and suspended until the next series of candles are moulded when those suspended are cut from the wick and removed in the manner described.

To G. W. Ingalls, of Concord, N. H., for improvement in Æolian Attachments.

I claim the combining with the valve stem or rod, a movable bar, or any equivalent mechanism, by which such valve stem, or the head thereof, whenever desirable, may be moved out of action with the key lever, for the purpose essentially as described.

To Lewis King, of Madison, N. Y., for improvement in Carriages.

I claim the employment or use of the chain and pulley, in combination with the dogs and slide bar, constructed and operating in the manner and for the purpose substantially as set forth; the lower ends of the dogs being raised or depressed by means of the levers (four) operated upon by the square or loop, or any other equivalent device, and the slide bar attached to or detached from the pole by means of the levers and pawl, operated upon by the bent lever, or their equivalents.

To Jno. McLain, of Circleville, O., for improvement in Harness Saddles.

I claim the sliding gauge hinge boxes, attached to the pads, so as to adjust the width of the saddle by the screws, substantially as described.

I also claim the manner of attaching the sliding gauge hinge boxes to the pads, by means of the housing between them and the top of the pad, and the set screws passing through the plate and top of the pads, substantially as set forth.

To S. D. Nims, of Palmer, Mass., for improvement in method of hanging Window Sashes.

I claim the manner described of arranging and securing window sashes in their frames, by means of grooves in the sides of the window frame that receive the edges of the sashes (or by projections from the sides of said frame or casing, that fit into grooves in the edges of the sashes), and by making one or both sides of the window frame or casing movable and elastic, by means of the springs or their equivalents.

To J. M. Patton & W. F. Fergus, of Philadelphia, Pa., for improvement in Cutters for Planing Machines.

We claim the constructing of a cutting instrument for operating upon lumber, of one or more elliptical-shaped saw or saws, placed upon an arbor, in positions so oblique to the direction of its axis, as to bring every portion of the periphery of said saw or saws, into the same perpendicular distance from the said axis of their arbor, by which the teeth of the said saw or saws are made to perform a combined rotary and laterally reciprocating cutting action in the same circle of rotation, substantially as set forth.

To James Renton, of Newark, N. J, for improvement in apparatus for making wrought-iron direct from the ore.

I claim the arrangement of a series of flat vertical tubes, or the equivalent thereof, in a vertical stack, substantially as described, when these are combined with a puddling or other furnace, as described, by means of an interposed ore box substantially as, and for the purpose specified.

I also claim combining with each of the deoxydizing tubes, as described, and at the middle and near the lower end thereof, a double inclined plane, substantially as described, to insure the equal descent of the charge of ore as described.

And I also claim, in combination with the series of the oxydizing tubes and the ore box, substantially as described, the employment of a series of adjustable inclined planes, substantially as described, to regulate and insure the equal discharge of the ore from each and from the whole series of tubes, as described.

To T. E. Shull, of Lewistown, Pa., for improvement in method of Setting up Ten Pins.

I claim attaching the pins to a disc or plate, by means of cords, in combination with the adjusting screen and guide screens, by which the pins are properly adjusted or set up on the alley, upon raising and lowering the disc or plate, as described, the disc or plate being operated by means of the cord passing over the pulleys and around the wheel, power being communicated to the shaft or by any other mechanical means.

[See Eng. on page 76, this Vol. Sci. Am].

To T. J. Sloan, of New York City, for improvement in machines for Counting Screws and Pins.

I claim the cylinder or wheel, formed with recesses in its periphery for the reception of the screws or other articles to be counted, and provided with a groove for the reception of and in combination with the detector, to indicate, mark, and register the number of screws or other articles that are delivered, the whole being constructed and made to operate as specified.

For improvements in Bolt-Heading Machines.

I claim the combination of the upsetting punch, the dies for shaping the sides of the head, the levers for working the dies, and the protuberance on the punch stock for actuating the levers, so that by the forward movement of the punch stock, the punch is caused to upset the end of the bolt, and by its retrograde movement the dies are worked, which give shape to the sides of the head, as set forth.

[By a mistake, the name of the patentee was left out of this list; it will probably be sent to us next week.]

To R. S. Tucker, of Brooklyn, N. Y., for improvements in Spinning Rope Yarns.

Spinning rope yarns upon bobbins having a movable head or heads, so that the yarn can be packed lightly upon the bobbin, in spinning, and after spinning, can be removed from the bobbin, to be transferred and hauled off into strands for cordage from the inner ends thereof, without unwinding, thus effecting a great saving of bobbins and labor.

[This is a capital improvement.]

To Wm. Wheeler, of West Poultney, Vt., for improvement in machines for Dressing Stone.

I claim the cylindrical tool holder, constructed and arranged substantially as set forth, so as to hold the tools, or chisels, and turn them in a direction to cut either way, keeping them in such position as always to receive the blows from the cams, in the same relative direction, and also incidentally to support the cam shaft by means of the cams resting against its interior, should the cam shaft spring.

To J. Ames & G. L. Wright, of Springfield, Mass., for improvement in machines for Ruling Paper.

We claim, first, the shaft and its projections operating as set forth, or any mechanical equivalent contrivances, in combination with the carrying apparatus or endless tapes, on which the sheets are received, moved and introduced to the action of the ruling apparatus, such carrying apparatus being made so as to operate, essentially as described.

And we also claim the shaft and its lifters, in combination with the carrying apparatus or endless strings, and the two sets of ruling apparatus, or contrivances, for supporting and ruling the paper on both sides, as described, such shaft and lifters, or the lifting apparatus, as it may be termed, being for the purpose of changing the overlap of the sheets, in manner as explained.

To Jacob Zimmer, of Tiffin, O., for improvements in attaching Cutters for Cutting Screws on Rails of Bedsteads.

All I claim is forming an opening in the end of the cylindrical head, so as to allow the cutter to be placed therein laterally, or inserted into its seat sideways, and securely confined in the manner set forth, whereby the cutter requires no adjustment, and is retained firmly in its position.

To John Allen, of Cincinnati, O., for improvement in Setting Mineral Teeth.

I claim setting mineral teeth on metallic plates, by means of a fusible, silicious cement, which forms an artificial gum, and which also unites single teeth to each other and to the plates upon which they are set.

I also claim to be the inventor of said cement, or compound, a full and exact description of which is given.

I also claim the combination of asbestos with plaster of Paris, for covering the teeth and plates for the purpose of sustaining them in their proper position, while the cement is being fused.

[The Patent Office is very erratic in its action. Here is a single patent granted for three distinct claims, for which we know many applicants would be ordered to apply for three distinct patents, as one could only be granted for each claim. If proof is wanted, we can furnish it.—[Ed.

DESIGN.

To Edmund L. Freeman, of Bellville, N. Y., for design for framer of presses, mantlepieces, etc.

Municipal Electric Telegraph.

We have received a pamphlet from the author, William F. Channing, M. D., describing an Electric Fire Alarm for cities. The system of Electric Fire Alarms, for cities, which is now being carried out in Boston, suggested itself at an early period to the mind of Mr. Channing, and he described its application to Fire Alarms in the Boston Daily Advertiser, in 1845. In 1845 its adoption was recommended by the Mayor of Boston, the Hon. Josiah Quincy, Jr., but it was not until the present year the plan was adopted, and an appropriation of $10,000 made to carry it out. In New York city, seven of our fire belfries are connected by telegraph wires so as to signalize from one to the other, and it is stated in the pamphlet that accounts have been received from Berlin, Prussia, of the construction of a Fire Telegraph there, but whether like the plan in New York, a mere signalizing one, Dr. Channing says, "does not appear." The Berlin one, we believe, is a mere signalizing one, and is connected with an electric clock—it is used in that city as a messenger in case of fire. The communicating wires have been recently completed,—and it is now possible to announce the outbreak of fire in any part of the Prussian capital, at every engine station within the walls in a few seconds. The watcher observes the red flame rising against the dark sky; in an instant his hand is on the wires, the message speeds along the electric line, the danger is made known to the proper officers, and in a few minutes all the means of resisting a conflagration at the disposal of a great capital can be brought efficiently to bear on the menaced point.

The Electric Fire Alarm of Dr. Channing is a great improvement on the signalizing plan, for it combines an alarm by sounds and is the most perfect system ever brought before the public; it is to be hoped that every city in our Unoin; yea, every one in the world, will, at no distant day, have Fire Alarm Telegraphs. They can be erected at a very small cost, in comparison with the great saving they will effect in communicating to every quarter of our Fire Department, in an instant, the precise localities of fires.

Boiler Tubes.

Mr. Prosser, of this city, has written a letter to the London Mechanics' Magazine, correcting an error in reference to what was stated to be a new improvement in the construction of the boilers of a new Swedish steamer, named the Berselius. It was stated that "the tubes were slightly enlarged behind the tube plate by a suitable tool." Mr. Prosser states that the tubes are fitted in this way in American boilers, and he obtained a patent for a tool to perform the operation at once. All the tubes in the Collins' line of steamers, he states, are fitted in this manner, and no engineer in the United States would think of putting them in by the old tinkering plan still employed in England.

The rooms of the New York Mechanics' Institute were burned down on last Saturday morning. The meetings will be held in the rooms of the school in Chambers street, until new rooms are prepared.

In the British Navy there are one hundred and forty-seven steamships, and thirty-two iron steamers, eleven of which are 1,500 tons burthen.