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LIST OF PATENT CLAIMS Issued from the United States Patent Office. FOR THE WEEK ENDING FEBRUARY 19, 1851.

To E. H. Aschcroft, of Boston, Mass., for insulated fusible plug for Steam Boilers.

I claim the arrangement, herein described, for surrounding a fusible plug and its case, by a stratum of air, in such manner that the plug shall promptly melt and give warning, after the water gets low in the boiler, but before the boiler plate to which the apparatus is applied, is left bare of water, substantially as set forth.

I also claim the arrangement of the stopper and plug case, substantially as herein described for stopping the escape of steam, to admit of the replacement of the fusible plug, without blowing off the steam or water from the boiler, after the plug has melted, substantially as herein set forth.

I likewise claim the method of preventing the waste of the metal of the plug after it has melted, by supporting it in a closed socket, the lower unoccupied part of which is of sufficient capacity to receive and retain the metal when melted, and to allow the steam to pass over it to escape.

To Thomas Champion, of Philadelphia, Pa., for improved Annular Steam Boiler.

I claim, first, the employment of the tapered ring for closing the ends of any of the water spaces of the concentric boilers, in the manner set forth.

Second, I also claim connecting the lower parts of the annular water spaces, each to each, from the upper and inner to the lower and outer one, substantially as described, by metallic rings or collars—thus giving free ebullition, assisting evaporation, and allowing the dirt to settle down into the blow-pipe, from whence it may be blown out—the aforesaid rings or collars bracing the boiler, as well as forming the connection between the cylinders.

To H. Garretson, of Clay, Iowa, for improvements in Hand Looms.

I claim the device, consisting, substantially of the tappet shaft, with its ring block, and together with the connecting cord, weight, and marches, whereby the heddles are raised and depressed in the proper order to form the shed, by the movement of the lay, substantially as herein set forth.

I likewise claim the device, consisting substantially of the levers, with the breast beam, cords, and picker-stick-cords, whereby the picker sticks are moved to drive the shuttle by the movement of the lay.

To P. S. Bears, of Hamden, Conn., for improvements in Machines for Turning Irregular Forms.

I claim, first, the three cutter cylinders (with cutters arranged as within described), in combination with the sliding frame, compound cams and cam rails, constructed and arranged substantially in the manner and for the purpose herein described.

Second, I claim the combination of the compound cams and cam rails, with the sliding rails and devices (within described) for holding and revolving the timber material, whereby such vertical motion is produced in the latter, which, being subjected to the action of revolving or vibrating cutters, as to reduce the timber to the required form.

To John A. Fry, of Edinburg, Va., for improvements in Tools for Tongueing, Jointing, and Rebating.

I claim so making a jointing, tongueing, and rebating plane, that the jointing and tongueing of a board, while resting on its edge, and

also the jointing and rebating of it while it lies on the flat side, may all be performed with one planing tool, in the manner substantially as herein described, and for the purpose herein set forth.

I also claim making the tongueing hand plane in such a manner as to enable the workman to make therewith, tongues of various thicknesses, substantially in the manner herein set forth, whereby I prevent the necessity of providing different tools to tongue planks of different thicknesses.

I also claim, in combination with a divided body or plane stock, the two cutters, having each a cross-cutting and side-cutting edge, and the means, substantially as herein described, for adjusting the distance apart of the two cutters and bodies, whereby the plane is made capable of dressing the sides of a tongue to any desired thickness, and at the same time to cut the shoulders, as herein specified.

I also claim, in combination with the gauge, the use of the body, and the cross edge of the cutter, to constitute a jointer, to straighten the edge of a board, preparatory to tongueing it, and while resting on its edge, in a situation to receive the tongueing.

I also claim the gauge, in combination with the notch, and the side edge of the cutter, acting as herein described, as a jointing plane, to straighten the edge of a board or plank, resting on its flat side, in a position to have a rebate cut in the manner substantially as herein set forth.

To C. T. Judkins, of Lowell, Mass., for improvement in Weavers' Heddles. Dated Feb. 18, 1851; ante-dated Dec. 10, 1849.

I do not claim metal, in combination with harness, or heddles, when used in the solid state and fixed to the harness or heddle yarn, at each end. But I claim covering, coating, or lining the loops or eyes in heddles, of a harness, with metal, by the process I have shown, or by any equivalent process.

To Wm. Post, of Flushing, N. Y., for improved attachment for opening and closing doors or shutters.

I claim the use of swinging attachments or jibs, for moving sliding doors, or shutters, constructed and operating substantially in the manner herein shown and described.

[This is an excellent invention.]

To Philip Rhodes, of Pittsburgh, Pa., for improved snatch-block.

I claim the closing up of the opening in the sides of a ship's snatch-block by means of a gate arranged and operating substantially as herein set forth, by which I am enabled to make the block shorter and more compact than it has heretofore been made.

I also claim the securing the pulley axle in its place, without the aid of screw and nut, or rivet heads, and in such a manner that it can be readily removed by means of the combination of the said pulley axle, with the enclosing strap, and the gate strap, substantially in the manner herein set forth.

To L. H. Southworth, of New York, N. Y., for improvement in Planing Machines.

I claim, first, the use of circularly grooved rollers in front of the cutter, to divide and cut the unplanned surface of the board, into narrow, longitudinal strips, whereby the outer shavings are taken off in narrow strings, or threads, in the manner and for the purpose herein set forth.

Second, I do not claim, simply, the arrangement of the plane stocks, with their cutters, upon the travelling frame, in such order, that one gang or set of cutters will plane one plank, by their movement in one direction, and another gang of cutters plane another plank by their movement in the opposite direction, and remove the first plank planed from the bed; but this I claim, only when these are used in combination with the circular groove circular roller, as within described.

To Isaac Straub, of Cincinnati, Ohio, for improvement in Saw Mills.

I claim the method of imparting a rocking or curved motion to the saw, and of straining the same, by mechanical devices, substantially such as herein described.

To J. T. Willoughby, of Scotland, Pa., for improvement in apparatus for raising and carrying water.

I claim the double draught cord, so arranged and connected with the car windlass, that

it effects the two-fold purpose of propelling the carriage to and fro, and of turning the car windlass, to unwind and wind up the bucket cord, thus ensuring the descent of the bucket into the well.

To E. J. Delany, (assignor to H. J. Adamson), of Philadelphia, Pa., for Design for Umbrella Stands.

Horseflesh for Food in Prussia and Austria.

In Austria the Government some time since gave, or rather renewed, a former permission for the sale of horseflesh as food. In Berlin the sale is also legal; but in spite of the efforts of unprejudiced philosophers, who can fall back on beef, and only patronise the equine substitute on principle and by way of example, the article does not find its way, avowedly at least, into consumption. Nothing seems to overcome the obstinacy of the public in this particular, and the philosophers eat and write in vain. They say, "It is reserved for the 19th century to root out a prejudice sanctioned by civilization, and to restore horseflesh to its true place as an article of consumption." But the 19th century is in this matter one crust of prejudices. The Berlin dinners at which all is horse-flesh under different modes of preparation, are still confined to a very limited circle, and it is believed are decreasing in frequency; but the question seems to be agitated again in Austria. There, too, the public are averse to "strange flesh," and display a perverse preference for beef and mutton. The example of the Tartars and the ancient Germans is repeatedly cited, but in vain. The skeptics reply that both those respectable races ate their horses for the same reasons that the French cavalry in retreat from Moscow cooked their steeds, because they had nothing better, and that misery makes men acquainted with strange food as well as strange bedfellows. The error of the horse eaters is, that they recommend for consumption the old and worn out animals who are relieved by age from the shafts or the plow; they regard every horse that escapes being eaten as so much nutrition lost to society; if they could bring into the market young and tender animals, with sinews unhardened by years of toil and driving, they might make more progress; but a young horse is as expensive to bring up to an eatable state as a bullock; so that there is nothing gained.

Propellers.

The British are constructing steam propellers at no small rate, and we would do well to pay some attention to the same. We were glad to see Commodore Skinner, in his last report, recommend the building of a number of naval propellers, and it gave us equal pleasure to see the same policy recommended by the Naval Bureau of Construction. All the new coasting vessels now being built in England, are propellers; and so many improvements have been made, that they are now almost equal to the paddle steamers. The city of Philadelphia appears to be the great American port for building propellers, and fine vessels they do make. Philadelphia will yet be a great place for building steamships—the reason for expressing this opinion is her situation for coal and iron.

We see by one of our Liverpool papers, that a great feat was performed not long ago by a propeller built on the Clyde. The Admiral, a paddle steamer of 700 tons and 300 horse power engines, left Greenock for Liverpool, and was followed shortly afterwards by the Arno, a screw propeller of 750 tons and 150 horse-power, designed and built by Messrs. Wood and Reid, at Port Glasgow, and intended for the Mediterranean trade. The Admiral had a start of from two to three miles, and during the passage down the Clyde gained a little on her adversary, owing to a strong head-wind which prevailed. On getting into more open water, under a little alteration of the course of each vessel, the more ample spread of canvas by the screw boat told greatly on her speed and she gained considerably on the Admiral, and both went into Liverpool together. The Arno's engines attained a speed of 60 revolutions per minute. She carried 600 tons of coal, and the average speed was 14 miles per hour. This was good sailing.

The Original Inventor of Flax Cotton.

A correspondent writing to the Philadelphia Ledger, claims the invention of "Flax Cotton" for Sands Olcott, of New Hope, Bucks Co., Pa. He says "it was brought to perfection and patented by him in 1839. It consists in taking the sun or kiln dried flax in the stem, spreading it out upon a wide feeding cloth, from whence it passes through a series of long fluted wooden rollers, say thirty sets, that is, sixty altogether, viz: thirty upper and thirty lower rollers, which so crush and break the stalk, that most of the wood drops from the fibre and renders the process of cleaning it easy.

The flax when separated from the wool is twisted into a rope; the rope should be rove about the thickness of a stout man's arm. This rope is then passed through another series of fluted rollers about six inches wide, and made either of wood or metal, the ends are twisted together, and an endless rope thus made; the rollers (a series of 20 or 30 sets) are then put in motion and a stream of water set flowing over them. The rope passing through in an endless round, the remaining particles of wood, or shives as they are technically called, are rapidly separated from the fibre, the gluten and coloring matter washed out, and the fibre itself reduced and divided into smaller and finer fibres. After the process has been continued a few hours, the rope is withdrawn much diminished in size, and quite white. On entwisting it when dried the product is "flax cotton."

This article is much more beautiful than the finest cotton, it is almost as soft as silk, and exceedingly glossy, but when closely examined it presents many imperfections. The fibres vary from half an inch to three inches in length, while the polished glossy surface of each fibre prevents their adhesion. The first difficulty Mr. Olcott obviated, by a machine he invented, that tore or separated the rove into equal parts, but the last difficulty, he never successfully overcame.

Mr. Olcott, after several unsuccessful efforts to introduce his invention in this part of the country, went to Cincinnati, and applied it to the breaking and preparing of hemp, for the making and bagging and rope at the factory at Newport. He died there of consumption, in 1841 or '42."

[The above process will, no doubt, do all that is claimed for it. Mr. Olcott obtained two patents for his invention—not in 1839, as mentioned above, but in March and April 1840.—Ed.]

Sharp Frosts in Valleys.

Lawrence Young, Chairman in the State Fruit Committee for Kentucky, to the Pomological Congress, states the following fact in illustration of the advantages of planting tender fruit trees on elevated ground instead of in valleys:—Lieut. Mauray placed a thermometer on a high portion of his orchard grounds, and another at the bottom, thirty-five feet lower. At 1 A. M. he found the thermometer at the bottom at 28°, and being surprised to see that on the hill at 33°, changed their position, but was soon convinced that there was a difference in temperature between the two points of five degrees.

Preserving Fresh Beef, &c.

Mr. Robin has communicated a paper to the Academy of Sciences, Paris, detailing a number of experiments made by him in the preservation of animal substances. He states that coal oil, chloroform, ether, and some other oils, preserve animal substances. By placing fresh beef in a well stoppered bottle, with a sponge containing coal oil, sulphuric ether, or chloroform, at the bottom, he was able to preserve the meat fresh for eight months. The vapor of chloroform and of rectified coal oil, preserved the meat in color and form perfectly fresh. This is something of great importance. He recommends the use of pure coal oil, in the preparations of leather, such as for currying; also for the preservation of anatomical specimens and the embalming of bodies.

Nutmegs have been found growing wild in Australia. This will no doubt injure the business of Ceylon in that kind of ware.