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Lard and Strychnine.

A short time since a paragraph was published in a number of our papers, it which it was stated that lard was an antidote for that terrible poison, strychnine. B. Keith, M.D., of this city, in a communication to the *Eclectical Medical Journal*, states that he has been experimenting, in order to verify or disprove the correctness of the lard antidote. He operated upon a strong and healthy dog, to which he administered 8 ounces of lard, and five minutes after one grain of strychnine. In six hours after taking this small quantity of strychnine the poor dog breathed his last. This experiment proves conclusively that lard is not an antidote to this frightful poison.

Drying up Rivers.

Turning Rivers from their Courses.—The Calaveras *Chronicle* says :—Great apprehension is being felt by those having river claims, in consequence of the probability that the whole stream of the Mokelumne river will be diverted from its natural channel by the numerous new ditches being projected. That this must be the case at some time or another is inevitable. But few years will pass by ere every mountain stream will be lifted from its natural bed, and made to subserve the purposes of the miner; and should any Rip Van Winkle rouse from his somnolency of twenty years, he would be sorely puzzled to find the original channels in which he used to dig and delve, and dam and flume in search of the glittering ore.

What Circular Saws can do.

The Wolverine *Citizen*, published at Flint, Mich., contains quite an article on the above subject, and presents some astounding statistics of what was done at East Saginaw, at Durfee & Atwater's saw mill, by a large circular saw. In 11 hours and 15 minutes it cut 26,425 feet of inch boards. This throws all the feats of saws, which we have published, entirely into the shade.

Cure for Rattlesnake Bite.

The following is from the last number of the Wisconsin *Farmer*:—"Take the yolk of a good egg, and put it in a teacup; stir in with it as much salt as will make it thick enough not to run off. Spread it as a plaster and apply it to the wound, and we will insure your life for a sixpence." If this is a reliable receipt it is the most simple one we have yet seen for the purpose; but we want evidence of its value.

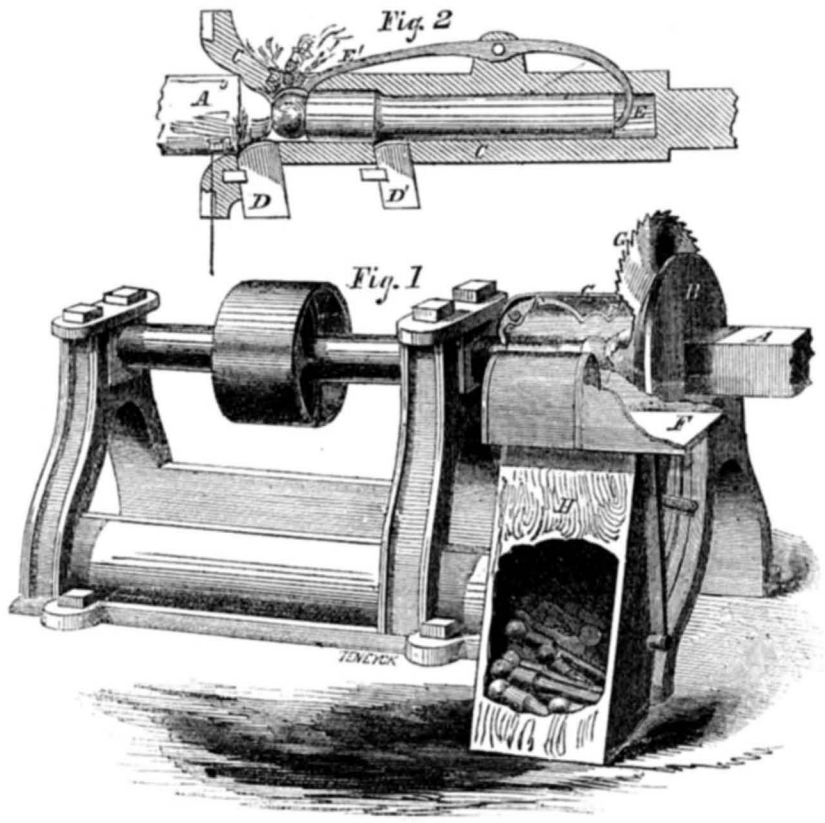
More Gold.

Nearly two million dollars of gold arrived at this port by the "George Law," on the 16th inst Copious rains had fallen in California, rewarding miners with a harvest of yellow metal.

Electric Clocks.

The city of Marseilles, in France, is about to establish a system of electric clocks throughout all its streets. The dials of these clocks are to be placed in gas lamps, so that the time can be read by night as well as day. This is an excellent idea, and will, we think, yet be adopted in all cities lighted with gas.

MACHINE FOR TURNING CLOTHES PINS.



Clothes Pin Machine.

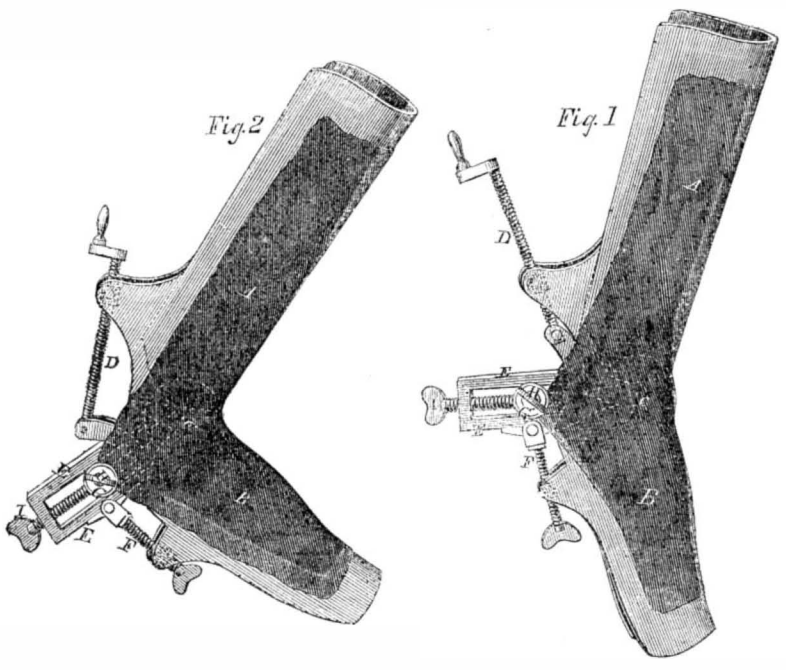
In this improvement the rough stick of wood, A, out of which pins are turned, is shoved through an aperture in the face of the machine, B, where it enters a revolving hollow mandrel, C (fig. 2.) At the entrance to the mandrel the stuff meets the cutter, D, which reduces it to a uniform rotundity, and admits it to the interior of the mandrel. Cutter D′ reduces the stuff still more, so as to form the shoulder of the pin. When the end of the stick reaches the further extremity of the mandrel it comes in contact with the pivoted lever cutter, E, and throws it up, bringing down the other end upon the stuff; this end, E′, is furnished with a peculiar-shaped cutter, which cuts the head of the pin. In figure 1 the cutting end E′ is thrown up away from the stuff; in fig. 2 it is seen in the act of cutting the pin head.

The stick having had a pin thus turned upon it is withdrawn from the mandrel, the end placed on the table, F, and moved against saw G, which severs the pin, and it drops into the box, H, below, ready for the slitting saw. The stick is then shoved into the mandrel again, a new pin turned, &c. The saw, G, is placed upon and revolves with mandrel, G; this saves extra gearing. Centrifugal force keeps the lever cutter in the position seen in fig. 1, except when it is pressed into cutting position by the end of the stick as in fig. 2.

This machine is applicable to the cutting of bedstead pins, and other forms. One man, we are told, can turn out from thirty to forty pins per minute. It is strong, simple, and effective. Mr. Curtis Goddard, of Edinburgh, Portage Co, Ohio, is the inventor, who will give further information.

Patented May 2, 1854.

IMPROVED BOOT CRIMPING APPARATUS.



New Boot Crimp.

The invention herewith illustrated is composed of two pieces, A B, a leg and foot, resembling an ordinary crimping board when placed together, but jointed at C, the point which represents the instep. By means of this joint, and the employment of a screw, D, the leg and foot are made to assume different positions in respect to each other, namely, from a position in which both are stretched out comparatively straight, as in fig. 1, to one in which they are bent together in a form a similar to that of a human foot and leg, as in fig. 2; this latter is the shape to which it is necessary permanently to reduce to leather in crimping. On pin C, which connects the leg and foot together, a guide, E, is hung, which is caused by a swivel thumb-screw, F, in connection with the foot, to radiate and assume different positions. This guide, E, is furnished with a slide, G, on the sides of which are circular washers, tightened by screws, H; these washers serve as pincers to grasp the edges of the leather at the instep. The slide, G, with its pincers, is caused to traverse the guide, E, by means of a thumb screw. F. When the leg and foot have been bent to their straightest position, figure 1, the leather is applied over their front edges, in such a manner that each corner is held by the pincers, G. The latter are moved out by means of screw, I, so as to stretch the leather comparatively tight at the instep. By means of the regulating screw, D, the foot of the apparatus is then bent over until it assumes the desired position in respect to the leg, stopping at intervals during the operation, in order to rub down, with the pane of a hammer or other hard and smooth instrument, the creases which collect at the instep, and occasionally stretching the leather tighter over the latter by means of the screw, or varying the direction of the stretch by turning screw, F, The whole is so arranged and constructed that the condensation of one part of the leather and the stretching of other parts (necessarily involved in crimping) is accomplished with such regularity and precision, that no wounding, cracking, or other deterioration of the leather takes place, as in ordinary crimping machines; thus permitting the successful crimping of upper leathers of boots of the finest quality, which have been hitherto required the hand process. The leg and foot parts are made of metal, hollow.

This invention appears to be one of a very valuable character. It greatly diminishes the labor required in boot crimping, while the work it produces is of a superior kind. We learn that it gives the highest satisfaction among all who have had it in use. The inventor is Mr. George Fetter. Further information can be had by addressing Messrs. Fetter and Sowerby, Holmesburg, Philadelphia, Pa. Patented March 4, 1856.

An American Printing Press for London.

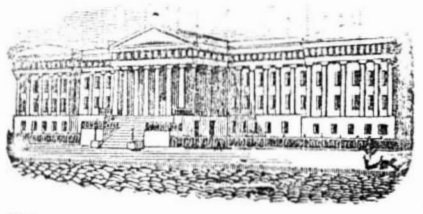
One of Hoe's celebrated six-cylinder printing presses—with experienced workmen to superintend it—was sent from this city by the *Ericsson*, on the 10th inst. It is to be used for printing *Lloyd's Weekly Newspaper*, in London. This is a large first class weekly journal, having a circulation of 140,000 copies. The time was when we used to import our printing presses from London, but the tables have turned in our favor, and we are paying back our debt with compound interest.

Terrible Railroad Accident.

On the 6th inst. a train on the Panama railroad was precipitated through a bridge, the timbers of which gave way, and nine cars filled with passengers, were crushed to pieces, and no less than 50 persons killed. It was a heartrending scene. The passengers were mostly from New-York, on their way to San Francisco.

A most terrible explosion of a steam boiler took place in the city of Albany, on the 15th ult. We shall review the evidence given by engineers on the Coroner's inquest, in our next number.

The City of Cincinnati has seven steam fire-engines, that do all the work of the Fire Department.



[Reported Officially for the Scientific American.]

LIST OF PATENT CLAIMS

Issued from the United States Patent Office

FOR THE WEEK ENDING MAY 12, 1856.

RIFFLE FOR GOLD WASHING.—O. G. Auld and J. S. Whiting, of Stockton, Cal.: We claim, in riffle boxes, the use of circular cavities or receptacles, constructed in the manner shown, having the neck of one diameter and the lower portion of an enlarged diameter, so as to operate in the manner specified.

LOCKS—W. H. Akins, of Berkshire, N. Y.: I claim so arranging a series of revolving slotted disks, c, upon a fixed neck or stud, D, that each in turn shall be made the means of adjusting the slot of the o her when operated upon by another disk, f, or its equivalent, secured to a revolving shaft, F, and index, G, for the purposes described.

Second, I claim altering the respective numbers of two or all the disks, c, by the simple change of an adjustable clutch from one hole to another, substantially as and for the purposes described.

Third, I claim the method described of discovering the proper numbers to open the lock, substantially as specified.

CARTRIDGE OPENER—Jesse S. Butterfield and Simon Marshall, of Philadelphia, Pa.: We claim the combination of a steady pin, thumb piece, toothed saw and spring, or their equivalents attached to the upper band of the gun, arranged and operated in the manner and for the purpose substantially as set forth.

FARM GATE—C. N. Cole, of Pleasant Valley, N. Y.: I claim the arrangement and combination of the parts forming a selt-acting or balance gate, as fully set forth.

WARDROBE TRUNKS—Wm. J. McCraken, of Rochester, N. Y.: I claim the construction and arrangement of the supporting strips, l l, in the portion of the trunk, a, for uniting the sliding portion of the wardrobe, E, to the part, a, of the trunk, as and for the purposes mentioned

PLANING MACHINE—C. B. Morse, of Rhinebeck, N.Y.: I do not limit myself to the precise mechanical devices set forth, nor to the exact combination and arrangement of the same, so long as the object is obtained without changing the principle of operation.

I claim, first, the combination of the following mechanical elements: planing cylinder, C, line plate, F, beds or rests, D E, and weighted levers, G, or their equivalents, when arranged and combined for reducing a board to an equal thickness without bending the same.

Second, making the edge, l, of the bed, D, a cutting instrument, and giving said bed, or rest, a longitudinal movement, simultaneous with the swinging back or forward of the cylinder, so that the edges of the cutters on the cylinder will preserve the same relative position with respect to the cutting edge of the bed, in all positions which the said cylinder may occupy.

Third, giving the line plate, D, a tilting motion about its own axis, to present its flat surface to the board under all circumstances, substantially as and for the purposes set forth.

Fourth, maintaining the pressure on the middle of the board, irrespective of the portion of the cutters to which the board is submitted, by means of the weighted levers, G, operating substantially as set forth.

FILE CUTTING MACHINE—James L. Norton, of Alum Bank, Pa.; I claim, first, hanging the worm wheel shaft in movable bearings, so that the worm may be disengaged from the feeding rack without stopping its motion to do so, for the purpose of allowing the carriage to run back, and be set for the next series of nicks, substantially as set forth.

I also claim, in combination with the movable shaft, the adjustable protection, m, and levers, S T, for first holding and then disengaging the shaft to admit of its swinging, substantially as set forth.

I also claim, in combination with the sliding carriage, the projection, t, and adjustable former, Y, for keeping the blank at a uniform distance from the nicking tool, for the purpose of equalizing the force of the blow, notwithstanding the taper of the blank, as set forth.

I also claim the use of the spaces, 1, 2, 3, for regulating the force of the spring upon the nicking tool, as set forth.

WATER WHEELS—G. W. Pittock, J. B. Scott, and Galen Richmond, of Troy, N. Y.: We claim the combination bucket formed by the union of two separate buckets whose lines are arranged substantially as described, so as to form a hollow box through which the water passes in operating the wheel.

We claim the mechanical arrangement and application of the gearing to the wheels and shaft within the upper section of the upper wheel, in combination with the cap which it covers, substantially as set forth.

BROOMS—T. H. Powers, of Wyocena, Wis.: The mode of securing the broom by means of the flattened cone and T follower, I do not claim.

But I claim the frame composed of links and rods which surround the broom and hold it in connection with the cone, as described.

CATTLE PUMP—T. H. Powers, of Wyocena, Wis.: I do not claim operating the platform and raising water by the weight of the cattle.

I claim the specific manner described, whereby the platform may be placed at a distance from the well, substantially as shown and set forth.

HEATING BUILDINGS BY STEAM—A. S. Pelton, of Clinton, Conn.: I claim the construction of the apparatus with annular chamber D around the fire pot, and constituting a portion of the channel from the boiler to the radiator for warming the air in the radiators previous to the generation of steam, as and for the purposes set forth.

The employment of this chamber as a mere super heater of the steam not being claimed as my invention.

R. R. SNOW PLOW—Saml. Richards, of Philadelphia, Pa.: I claim the construction of a snow clearer, of a simple rising inclined plane, A B, in combination with the curved pieces at F, so arranged that the snow shall be gradually raised at or near to the surface of the surrounding snow, and then discharged over, on the top of it, substantially as described.

Second, I claim the employment of a series of pipes or other heating apparatus in the interior of a snow clearer, for the purpose of diminishing the adhesion of the snow o the upper surface of the clearer.

MAKING BRASS KETTLES—F. J. Seymour, of Waterbury, Conn.: I claim forming brass kettles or similar articles from discs of metal by the successive operations as set forth, commencing at the bottom and smaller part of said kettle, and shaping the same at once, and then gradually forming a drawing in the sides by means of dies substantially in the manner and for the purposes specified.

CHAIRS FOR SHIPS' CABINS—Wm. Thomas, of Hingham, Mass.: I do not claim suspending or attaching the chair to a base or frame, so that it will remain stationary, while the base or frame is moved or rocked, irrespective of the peculiar manner of attaching or suspending the same.

But I claim suspending or attaching the chair, D, to the curved bar, C, which is connected to the base, A, by means of the arms, F F G, and curved bar. E, arranged substantially as shown and described, for the purpose specified.

FIRE AND ESCAPE LADDER—John Van Amringe, of Cincinnati, Ohio: I claim the combination of the ladder, 2, frame, 7, and guy chains, 23, as attached to the frame work, 17. 17, and these, in combination with the pulley, 3, and rope, 24, or their equivalents, for elevating the latter and frame, substantially for the purposes set forth.

I also claim the arrangement of the guiding shafts, 21, arranged with the two sections of the framing, 17, and the windlass, 1, and the cord connected therewith, and to one of said sections, 17, for drawing the two sections apart and together, for purposes mentioned.

OVENS—John Starrett and N. J. Wier, of Lowell, Mass. We claim, first, the distrbutor plate, D, constructed and arranged substantially as described.

Second, the combination of the distributor plate, D, the chamber, C, with its net work covering, and the exterior cases, A and B, substantially as set forth.

Third, the combination of the plates or registers, H H, with the net work covering of the chamber, C, for the purpose of varying the surface of combustion to suit the various utensils to be heated, substantially as set forth.

PREPARING DOUGH FOR MOLDING CRACKERS—F. C. Treadwell, Jr., of New York City: I claim the use of the cutters in combination with the throat, for the purpose of making a shear cut, when used in combination with the grooved rollers, substantially as described.

FURNACE FOR HEATING SOLDERING IRONS—James Wilson, of Brandywine, Del.: I claim constructing a furnace and providing it with any desirable number of cells, E E, substantially in the manner described, for the purpose of heating solder irons with anthracite or other coal, as set forth.

HORSE SHOE—N. B. Carpenter, of New York City: I do not claim any particular construction or form of a horse shoe, with a rim or flange, although the latter is in fact, inseparably connected with my invention, yet I am, aware that flanges or rims detached in part have been used heretofore in this and other countries.

Neither do I claim a heel car or round shoe, separately considered, as that too has been used heretofore.

But I claim a horse shoe having a branch bar attached to each heel bar of the shoe, extending inwardly, and at the same time lapping and fitting one to the other, with corresponding apertures through each, for the insertion of a pin or screw, for the purpose and in the manner set forth.

SURGICAL SPLINT—John Clough and D. M. Cummings of Enfield, N. H.: We claim, first, the bed composed of strips of cotton cloth, h h h, &c., or other suitable material passing through the slots, i i, &c., in the leg side pieces, A, arranged and confined as described, for the uses and purposes set forth.

Second, the foot frame and bed, composed of the oblique standards, I, the bow, P, and the strip of cloth, h h, or other suitable material, passing through the slots, i i, attached to and adjustable upon the side leg pieces, A, and for the purposes and uses described.

Third, the device for extending the leg by the employment of the lower extension screws, e e', the traversing nuts, j, and their guides, k, with their connecting straps, x, in combination with the cross bars, J and K, the leg side pieces, A, and the femur side pieces, F F, the femur splint, E, the cushions, G and H, the bolster, L, the bandages, U and O, with their connecting straps and the brass straps, V, constructed and operating in the form and manner described.

Fourth, the device for extending the thigh by the employment of the upper extension screws, r, in combination with the femur side pieces, F, by the leg side pieces, A, the femur splint, B, the cushions, G and H, the bolster, L, the bandages, U and O, with their connecting straps, and the brass straps, V, constructed and operating in the form and manner described.

Fifth, the device for flexing and extending the limb by the employment of the elevating screw and its supports, y y, in combination with the cross bar, M, the leg side pieces, A, the femur side pieces, F F, the supports, m m, and o o, the braces, t t, the elongating arbor, T, the concave flooring, N, and the bed pieces, B C and D, constructed and operating in form and manner described.

Sixth, the elongating arbor, T, constructed and operating in form and manner as described.

Seventh, the device for spreading and contracting the splint, by the employment of the elongated tenon, d, passing through corresponding mortises in the lower ends of the bed pieces, B C and D, in the double elongated tenons, j, firmly fixed in the upper ends of the bed pieces, B and D, and passing through a corresponding mortise in the upper end of the bed piece, C, and the confining pin, k k, in combination with the bed pieces, B C and D, the supports, m m and o o, the braces, t t, the elongating arbor, T, the femur side pieces, F F, the leg side pieces, A, the cross bars, J and K, constructed and operating in form and manner, as described.

CONTINUOUS SHEET METAL LAPPING SURFACE—J. B. Cornell, of New York City: I claim a continuous sheet metal lap surface formed of united strips or sections of the shape, substantially as set forth.

CUTTING GREEN CORN FROM THE COBS—Wm. B. Coates, of Philadelphia, Pa.: I claim the spindle, F, with any convenient number of prongs, e, in combination with the yielding cutters, G G, the whole being arranged and constructed substantially in the manner and for the purpose set forth.

BRIDLE BITS—B. J. Day, of Gibson Co., Ind.: I do not claim the attaching of a gum elastic strap or other elastic material, to the upper ring of the common curb and lever bit by one end, the other extending a few inches out on and attached to the rein, which itself is attached to the lower ring; nor do I claim straight, curved and spiral springs.

I claim the screw, h, the spring and folding limb, c, applied and operating substantially in the manner described, by which the common curb, and lever bit, and the noncurb and lever bit can be changed at pleasure, from one to the other.

SELF-COUNTING MEASURE—Elisha Dexter, of Holmes' Hole, Mass.: I claim supplying the point which marks the extremity of the yard or standard of measure with the pressure knob, A, and connecting it with the pointer, E, by means of the escapement lever, F, and the rack, C, as a means of pointing out the number of yards measured upon the index, as specified.

TREBLING SINGLE THREAD—Lucius Dimock, of Hebron, Conn., and Ira Dimock, of Mansfield, Conn.: We claim, first, the rock shaft, G, with a hollow conducting arm, g, operating substantially as described to conduct each strand thread from its bobbin to the hitching pin or its equivalent and to effect the enchaining of the loops.

Second, the attachment of the hitching pin or pins, h', to the arm or arms, h, of a rock shaft which is operated substantially as described, for the purpose of forming and disengaging the loops.

Third, the arrangement and combination of the rock shaft, G, having a hollow conducting arm or arms, g, the traveling carriage, F, carrying the rock shaft, G, and its vibrating hitching arms, h, the strand bobbins, B B, and the trebbled thread spools, C C, the whole operating substantially as set forth.

DRESSING MILL STONES—S. W. Draper, of South Dedham, Mass., and Reuben M. Draper, of Roxborough, Mass. In combination with the inversion of the cam, G, we claim the employment of a secondary lever, m, attached to the sliding piece, A', or arranged in any equivalent manner to cross the face of the cam on one side of the center, and transmit motion therefrom to an arm, c', on the pick shaft, whereby in all changes of the relative positions of the pick shaft and the cam, the pick is operated by the cam in such a manner as to give an uniform force to the blow, as set forth.

BOW FOR VIOLINS—S. F. French, of Franklin, Vt.: I claim the attachment of a portion, d d of the hair of the bow to a movable pin, f, or its equivalent, operating as described, to separate the said portion, d d, of the hair from the main body of hair in the bow, or to unite it therewith, at the pleasure of the player.

SELF-RAKING ATTACHMENTS TO HARVESTERS—Hugh Fousman, of Enon, O.: I claim the combination of the wheel, D, adjustable crank. E, slotted rake, F, and guides or ways, g m, for giving the rake its traversing and rising and falling motion, substantially as described.

HAT-FELTING MACHINES—A. C. Fuller, of Danbury, Conn.: I do not claim a vibrating rubber bed in combination with rollers having positive and reverse action.

But I claim the polygonal drum, B, constructed, arranged, and operated substantially in the manner and for the purposes described.

HAND SAW—Jackson Gorham, of Bairdstown, Ga.: I claim the construction of a saw so as to answer the purposes of both saw and square in one and the same instrument, substantially as described.

LOCK JOINT FOR R. R. BARS—James R. Hilliard, of Paterson, N. J.: I claim in joining the sections of rails for railroad heads the combination of the several laps, substantially such as described, and consisting of, first, the lapping each against the other, along a central longitudinal vertical plane, or nearly so: second, lapping each on to and under the other on planes parallel, or nearly so, with the longitudinal axis of the rail; and third, making the surfaces where each laps on and under the other, inclining downwards from each side of the rail towards the central longitudinal vertical plane of division of the joints, substantially as and for the purpose specified.

HUSKING THIMBLE—J. H. Gould, of Smith, O.: I claim the device shown, resembling the end of a human finger, and formed by providing a thimble, A, very similar in construction to a sewing thimble, and welding or otherwise forming an artificial finger nail, B, on the upper side of its forward extremity, substantially as and for the purpose set forth.

WINNOWING MILLS—Horace N. Goodrich, of Aurora, Ill.: I claim the arrangement of the screens, A B C D, above the ordinary screens and shoes of a common fanning mill, and furnishing a regulated blast to said series of screens, either from the main fan wheel, or any auxiliary wheel near thereto, for the purpose of comprising within one machine or frame the facilities for cleaning all kinds of grain or seeds, and separating them from each other and from the impurities mixed with them, as set forth.

PUNCHING MACHINE—Edward Heath, of Fowlersville, N. Y.: I claim placing a series of punchers, L, of varying sizes and forms in a flanched rotating cylinder, J, arranged relatively with the plunger rod, l, as shown, so that by rotating the cylinder either of the punchers may be brought in line and connected with the plunger rod, substantially as described.

PORT MONNAIES AND POCKET BOOKS—James Hewson, of Newark, N. J.: I claim the combination of the catch, b, or swivel, e, and spring, A, with the ring, d, attached to the port monnaie or pocket book frame, in the manner and for the purpose described.

MANUFACTURING WASHBOARDS—J. B. Holmes, of Cincinnati, O.: I claim the arrangement of the cams, 3 3 and 6, spring, 4, and ring, 5, for operating the incising knife or cutter, 7, as mentioned.

I also claim the arrangement of the guide piece, 12, and gauge pieces, 22 22, for purposes mentioned.

COMPOUND RAIL FOR RAILROADS—Wm. J. Holman, of Indianapolis, Ind.: I claim the extension at sundry points throughout its length or lengths by waved or irregular formations of the stem or flange, a, of the cap bar of the tripartite rail below, and through or beyond the bottom surface of the two side or chair rails, and in connection and combination therewith by key or wedge passing through the one rail only from below, as and for the purposes set forth.

SECURING KNIVES TO CUTTER HEADS—Wm. D. Hooker, of Dedham, Mass.: I do not claim operating a wedge by a screw, it having been done before.

I claim the cutter head, A, the shanks, a a, of the cutters, the wedge, D, the screw rod, E, the whole in combination, arranged substantially as described and for the purpose specified.

INVALID CHAIRS—Daniel S. James, of New Market, Va.: I claim the construction of invalid chairs of a loosely jointed frame, in combination with a brace, f, operating substantially as and for the purposes specified.

MOWING MACHINES—C. M. Lufkin, of Ackworth, N. H.: I claim the employment or use of the endless aprons, J, in connection with the rotating cutters, D D', arranged as shown for the purpose specified.

FASTENING BITS—Horace Lettington, of Norwich, N. Y.: I claim the rod or arbor, D, passing transversely through the stock or bit, A, and a portion of the socket, B, the rod or arbor having a notch, d, in one side, and the shank, b, of the notch, C, also having a notch, e, in one side, and the rod having a bolt, E, pressing against it, the parts being arranged as shown for the purpose specified.

PORTABLE CHAIRS.—Zebulon Lyford, of Lowell, Mass.: I claim my self-operating, folding, portable chair, or its mechanical equivalent, constructed, arranged and operated substantially in the manner and for the purposes set forth.

WORKING SHEET METAL—Sylvester B. Miller and Ezra W. Whitehead, of Newark, N. J.: We do not claim a rotating die or countersink for making depressions by cutting and removing the material, as the means for doing so are well known, and are for another purpose.

We claim the employment of the die, E, when constructed as described, and used in connection with the lower die, N, for extending or stretching thin metal plate by pressure and rotary motion combined.

BRICK MACHINES—Edmund Kingsland, of New York City; I claim, first, the oscillating finisher, F, provided with a pair of fixed and a pair of movable bearings, operating as described, in combination with a mold cylinder, containing flat faced molds, for the purpose of finishing the bricks with flat outer surfaces, as set forth.

Second, the employment, for varying the depth, of all the molds simultaneously to vary the thickness of the bricks of the two cones, H H, the right and left-handed screw shaft, C', and the nuts, g g, all applied to the mold cylinder shaft, and operating substantially as described, in combination with the inclined edges, e e, on the piston bars, G G.

BLOW PIPES—Oliver S. Lawson, of Crestline, O.: I claim in combination with the adjustable valve, l, in the cylinder, the adjustable, E, in the tube, D, so that a regulated blast may be had whether sharp or mild, substantially in the manner and for the purpose set forth.

GAS REGULATORS—Henry Waterman, of Hudson, N. Y.: I claim the construction of the valve of the gas regulator in the annular or ring formed with two faces or leats of different diameter, one at the outer and one at the inner periphery or edge, so as to produce greater circumferential capacity or opening for discharge of gas, with a limited area of valve relatively working in a manner and for the purpose set forth.

SEEDING MACHINES—Hosea Willard, of Vergennes, Vt.: I claim the rotating cylindrical frames or screens, J J, in combination with the inclined board or plate, K, with pivoted cleets, K', attached for the purpose of distributing the seed, and the cylinders or rollers, G G, having teeth, c, or shares, d, attached to their peripheries, substantially as described for the purpose specified.

OVENS FOR COOKING RANGES—Jacob S. Williams, of St. Louis, Mo.: I claim the employment of removable ovens provided with unconnected compartments of various sizes and forms, and arranged so that said ovens may be substituted one for another, or be inserted in different positions, for the purpose of subjecting their compartments to different intensities of heat, according to the nature of the viands to be cooked therein, substantially as described,

LOCKS—Joseph M. Lippincott, of Pittsburg, Pa.: I claim the combination of the spring bolt, l, tumblers, t t, and fence, h, constructed and arranged in the manner and for the purposes described, together with the combination therewith of the locking bolt, i, and latch bolt, p, so that the lock may be readily opened from inside without a key, and yet requiring a key to open it from the outside, substantially as set forth.

ROLLING FILE BLANKS—James N Aspinwall, (assignor to himself and Henry E. Staff,) of Newark, N. J: I claim the use of the rollers, A B, as described, for forming file blanks, when said rollers are operated and adjusted by the slide, K, cam, I, and springs, d, as set forth.

MOWING MACHINES—Jonathan F. Barrett, (assignor to Abram B. and Jonathan R. Barrett,) of North Granville, N. Y.: I make no claim to the rotary cutters nor to the gearing driving them.

But I claim the combination of guard plate, P, covering plate, m, and saw connection to pinion, whereby the driving mechanism is effectually excluded from foreign matter substantially as set forth.

CUTTER HEAD FOR LATHES—Milton Roberts, (assignor to himself and Isaac N. Felch,) of Belfast, Me.: I claim the eccentric insertion of the tenon, E, of the cutter head, B, in the mandrel, A, as represented, to produce an eccentric motion in throwing out the edge of the cutter, and performing as set forth.

FRAMES FOR TRAVELING BAGS AND MAIL POUCHES—Samuel D. Quimby, of Winchester, Mass., (assignor to Edward A. Locke, of Boston, Mass.) I claim the improved mouth frame or combination of two folding side frames, A and B, and two hinge extenders and gore closers, C, D, arranged, connected, and made to operate together, substantially in the manner and for the purpose as stated.

RE-ISSUE.

OIL GROUND TO RECEIVE PHOTOGRAPHIC COMPRESSIONS—Joel H. Tatum, of Baltimore, Md. Patent dated April 15, 1856: I claim the mode of preparing and rendering oil (or oleaginous) bodies, grounds or surfaces impressible or sensitve to the photographic art, by the temporary destruction or chemical change of the oil or oleaginous matter on the immediate surface only, by the use of spirits of wine and alkaline solution, or their equivalents, and after fixing the impressions by the use of hydro sulphate of soda and the use of dilute acid, by which last application the alkalies are neutralized, and the oil restored with the impression permanent upon the surface.

Disclaiming everything heretofore known in the production of photographic pictures upon paper or any unoiled body or surface.

DESIGNS.

PIANOFORTE LEGS—Isaac Engel, of Boston, Mass.

COOKING STOVES—Anthony J. Gallaher, of Philadelphia, Pa.

PARLOR STOVES—N. S. Vedder and Wm. L. Sanderson, of Troy, N. Y., assignors to N. S. Vedder, aforesaid.

PLATES OF COOKING STOVES—W. L. Sanderson and N. S. Vedder, (assignors to Sanders, Wolfe & Warren,) of Troy, N. Y.

OVEN AND STOVE DOORS—Joseph A. Read, (assignor to John H. Cahill,) of Philadelphia, Pa.

Recent Foreign Inventions.

Oil for Painting.—P. Gontier, of Paris, has taken out a patent for treating poppy, linseed, and other oil for mixing with paint, by adding to these oils, when slightly heated in a caldron over a fire, sulphuric acid, resin, manganese, and litharge. One pound of oil of vitriol and one pound of manganese are sufficient for ten gallons of oil, and ten pounds of resin. They must be added cautiously, and stirred well for three or four hours.

Iron Tubular Ships.—James Hodgson, of Liverpool, Eng., is now building iron screw steamships on a principle for which he has taken out a patent. These vessels are constructed without frames, side-frames, floorings, &c., in dispensing with which it was found necessary to increase the strength of the plating for the sides; but to double the strength it is not necessary to double the thickness of the plate, as the strength of the materials increases as the square of the thickness. The strength is further increased by a bulkhead being placed in the widest part of the ship, amidships, and by other bulkheads placed midway between the midship bulkhead and the bow and stern, and again by the interposition of stiffening plates, so as to spread the strain along the vessel's side from one to four feet from the bulkhead. As the sides of the ship, under ordinary circumstances, are much weakened by the holes cut for the bulkheads to be secured to, the patentee extends the butting piece, usually placed over the joint, along the line or strake of plates, and spreads the rivets over a wider area. By the construction of a ship in this manner—in fact, on the principle of a huge steam-boiler or tube, with rounded top and sides, capable of sustaining great pressure—the usual appendages, knees, angle-iron plates, and rivets, for gunwale fastenings, are entirely dispensed with.

Manufacture of Steel.—The correspondent of the London *Mining Journal* in Rhenish Prussia, expresses surprise that some of the capitalists in England do not turn their attention to puddling pig-steel, which in Prussia is making rapid strides. Puddling both iron and steel with gas is very general in Prussia. In some instances the gas is obtained from the blast furnace, but in most cases it is generated in small ovens, attached to each furnace. Dry wood, charcoal, lignite, and turf are employed as fuel. At one of the iron works where wood is used for gas the charges are 8 cwts. of white mottled iron each furnace, bringing out 20 to 21 tuns of puddled bars per week, at a loss of only 4 or 5 per cent., and with a consumption of 4 cubic feet of timber per cwt. of puddled bars. At another works they charge with 10 cwts. of gray pig, and bring out the charge in 2 1-2 hours, with 8·70 cubic feet of wood per cwt. of puddled bars. A large rolling-mill is arranged to puddle steel with gas from lignite, to be converted into railway wheels and tires, for which there is an increasing demand. These are forged under the hammer to nearly the required form, and then passed through a pair of rolls, to finish them.

The Niagara Frigate.

The coppering of this noble vessel was finished on the 12th inst., and she was taken out of the dry dock the succeeding day. During the time she was getting on her sheathing, at the Navy Yard, the *Adriatic*, belonging to the Collins line, was partly planked, launched, sheathed, had her boilers, bed plate, and other machinery put in, and will no doubt be ready for sea half a year before the *Niagara*, although the latter vessel was launched some weeks earlier. Government jobs are slowly executed.