

BAKER'S OVEN—William R. Nevins and Joseph J. Yates of New York City. Patented in England March 13, 1857. We claim the combination and arrangement of the endless apron, H', and hexagonal rollers, H, to which an intermittent progressive motion, corresponding with the motion of the apron of the cracker or biscuit-cutting machine is given, horizontal flues, K, K', and bridge wall, B, between the lower flues, K, and furnaces, R, substantially in the relation to each other described, and for the purpose set forth.

[A notice of this improvement will be found in another column.]

MACHINE FOR ADDING NUMBERS—John R. Newbrough, of St. Louis, Mo. : I do not claim as my invention the rotating dial, and the manner of its movements. But I claim the obstructing wheel, containing a successive number of slots, corresponding to the circles of figures on the dial, when arranged in combination with the dial, to produce the result as shown and described.

MACHINES FOR SAWING MARBLE, STONE, &c.—James Norman and Aaron R. McLean, of West Dresden, N. Y. : We claim the carriage as constructed of the parts, F, E', and F F', with the means for holding and adjusting the same, and for holding and adjusting the stone thereon, in combination with the endless saw, when the several parts are constructed and arranged substantially in the manner and for the purpose set forth.

REVOLVING FIREARM—William Palmer, of New York City : I claim the combination of the trigger, g, hammer, e, seer or hair trigger, k, and slotted plate, h, or its equivalent, substantially as specified, whereby the hammer is cocked by the pull of the trigger, g, and then disconnected therefrom, so that the strain is transferred from the trigger, g, to the hair trigger, k, and then the latter is disconnected by the further pull of the trigger, g, as set forth.

INDIA RUBBER CAR SPRINGS—Sanford Peatfield, of Ipswich, Mass. : I am aware that vulcanized india rubber car springs have before been formed by winding a thin sheet of prepared india rubber, or woven webbing prepared with india rubber, on a mandrel in the form of a scroll, while in a green state, as it comes from the heated calendaring cylinders, therefore I do not lay claim to a spring thus formed of prepared woven webbing.

But I claim the application in the construction of car springs, of the combination knit and rubber fabric specified, in the following manner, to wit, the combination knit and rubber fabric being wound in several layers tightly round a central axis or "former," or placed flatwise layer upon layer over the axis or former, and afterwards pressed and acted upon by heat until it becomes a compact and united universally yielding mass, substantially as and for the purposes set forth.

[A notice of this improvement will be found in another column.]

CULTIVATORS—Thomas Wm. Poole, of Brunswick, Ohio : I claim the combination and arrangement of the hinged arms, B B B, and fixed concentric guards, D D D, in the manner specified.

CLOTHES' DRYER—Emma T. Porter, of Washington, D. C. : I claim the combination of the adjustable frame and supporting braces with the pivoted stand or foot-piece, substantially as and for the purpose specified.

LAMPS—William H. Racey, of St. Augustine, Fla. : I claim the case, G, provided with a cap, L, and used with or without the external case, 1, the case and cap being placed relatively with the frame M, as described, so as to operate as and for the purpose set forth.

[For more information about this invention see another page.]

RIDDLES FOR THRESHING MACHINES—F. W. Robinson, of Richmond, Ind. : I claim the plate, C, with lips or tongues, c c c, as shown and described, in combination with slats, R B B, for purposes set forth.

METHOD OF LAYING SUBMARINE TELEGRAPH CABLES—Samuel Samuels, of Brooklyn, N. Y. : I claim passing the cable from the ship or vessel through the bottom thereof, at or near the point specified, substantially as and for the purpose set forth.

And I also claim the employment, to conduct the cable to the bottom of the vessel, and to exclude the water from the opening in the bottom where the cable leaves it, of a tube, the whole or the lower part of which has a downward inclination toward the stern of the vessel, substantially as and for the purpose specified.

[A notice of this improvement is given in another column.]

PLOWS—B. B. Scofield, of Andover, Ill. : I claim the arrangement and combination of the pivoted bar, g, share, D, landside, E, standard, F, curved rack, e, pinion, G, and lever, H, as and for the purposes shown and described.

[This invention consists in combining a sulkey with a plow in such a way that a person while sitting therein, and merely driving the horses, may plow equally as well as by grasping the handles of the ordinary plow, and guiding it by that means.]

RAILROAD SWITCHES—Charles L. Spencer, of Providence, R. I. : I claim the use of two frog guiding rails, having the tread rails immovable, but an inside movable section of each guiding rail capable of working simultaneously together, for the purpose of influencing the course of a train of cars when proceeding in one direction, and of preventing injurious consequences in case the switch is improperly set when the train is proceeding in the opposite direction, constructed, applied, and operated substantially as described.

ROTARY PUMP—B. T. Trimmer, of Rochester, N. Y. : I am aware that annular pistons are and have been employed in rotary pumps, and the use of such I do not claim, except in combination with the described devices for rendering their operation durable and efficient.

But I claim the construction of the triangular reciprocating butments, L, working in grooves in the case, ff, with arms clasping around the edge and into the annular recesses, d, of the loose piston, G, to admit of the butment accommodating itself to eccentric action of the piston without materially obstructing the motion thereof, and at the same time packing against its seat, a, and the periphery of the piston, by the pressure of the water on its double inclined surfaces, i, k, the parts being arranged and operating substantially in the manner described.

I also claim the combination and arrangement of the two cylinders or cases, A, A, cams, I, pistons, G, and butments, L, with the chambers, C, E, and ports, b, b, and c, c, whereby the parts will operate conjointly, for the purpose described, or either cylinder work independently of the other, substantially as set forth.

EMBROIDERY AND SEWING STAND—Wm. H. Trowbridge, of Saginaw City, Mich. : I do not make any claim to the invention of the spool rack, or to the work-box and its appendages.

But I claim the combination of the plate, m, the spring, e, the screws, o, and i, the thumb-screws, z, the box, d, the spool rack, k, l, arranged substantially as described for the purpose specified.

METHOD OF LAYING SUBMARINE CABLES—Owen G. Warren, of New York City : I claim the use of a reel, A, immersed in the water, to deliver a telegraph cable at the bottom of the sea, constructed and operated substantially as described.

I also claim the combination of the reel, B, with the reel for the convenience of using the brake or operating engine in the manner described.

MACHINE FOR MAKING WIRE SPRINGS FOR FURNITURE—C. A. and S. W. Young, of Providence, R. I. : We claim a single grooved roll, D, in combination with the upright rod, n, to effect the coiling of the wire.

We also claim varying the diameter of the coils to produce a bi-conical form in the spring by causing the roll, D, to approach and recede from the coiling rolls in a direct or curved line horizontally, substantially as specified.

LOOKS—T. R. Pyle, of New York City : I am aware that sliding tumblers have been previously used and provided with slots made in them at varying distances apart, therefore I do not claim the tumblers separately.

But I claim the tumblers, C, slotted as shown, provided with projections, d, and used in connection with a shackle, B, or its equivalent, in combination with the bar, B, and spring, e, the above parts being arranged to operate as and for the purpose set forth.

CHURN—G. L. Farrington (assignor to D. B. Tiffany), of Xenia, Ohio : I claim the employment of the double concavo-convex dashers, constructed, arranged and operated in the manner specified and for the purpose set forth.

BLIND OPERATOR—J. A. Dorman and J. E. Stearns (assignors to J. A. Dorman), of Worcester, Mass. : We do not claim an inside blind operator as such.

But we claim, first, The combination of the rod, G, slide piece, H, and spring, K, with the catch plate, D, and knob, E, when constructed and operating substantially as described.

Second, The manner of holding the blind down in place by combining with the stud, R, the projection, S, fitting into the recess, T, as specified.

CLOTHES' DRYER—E. G. Gibson (assignor to H. G. Finkham), of Owego, N. Y. : I do not claim, broadly, a rising and falling frame, nor the lifting thereof by wind-ropes and cords.

But I claim the arrangement of the square or box head, B, between the pieces, a, a, of the arms, c, c, as and for the purposes shown and described.

[The object of this invention is to simplify the construction of revolving clothes' dryers, and at the same time to obtain a durable device, one that may be readily kept in repair, and constructed at a comparatively small cost. These articles are now quite extensively used, and are exceedingly valuable, for by their aid a large quantity of clothes may be exposed to the drying action of the air within a limited space; but as they have hitherto been made, the expense has been so great as to exclude them from use among those who most need them, namely, the poorer class, who, especially in large cities, have very small gardens or enclosures. This invention places them within the reach of all.]

HANGERS AND BOXES FOR SHAPING—F. W. Howe, of Newark, N. J., assignor to the Newark Machine Company : I do not claim the self-oiling of the boxes, nor the adjustment of the boxes, nor do I claim by itself the device of a hanger open at the bottom, so as to receive the shaft and its box from below.

But I claim, in combination with such a hanger, the self-adjusting box in the manner set forth.

CUTTING THREADS OF WOOD SCREWS—H. L. Kendall and H. P. Hunt, (assignors to the New England Screw Company), of Providence, R. I. : We claim the cutting of the threads of wood screws by means of chasing tools whose cutting edges have profiles which are respectively counterparts of the body and sloping portions of the screws, and which are caused to act in succession upon the screw blank.

SEED DRILLS—Alexander Turner, (assignor to himself, R. Bess, and H. Sloane), of Franklin, Ind. : I claim the arrangement of the seed boxes, A, A, and B, B, the driving, C, secured as described, and the lever, a, wheels, c and d, rod, e, and seed slides, ff, and g, g, the whole being constructed and operated in the manner and for the purpose fully described.

ROOFING MACHINE—E. Wise of Hannibal, Mo., assignor to himself and C. L. Wood, of St. Louis, Mo. : I claim the combination of the adjustable wheel, C, with the two wheels B B, substantially as described for the purpose specified.

I also claim the combination of the two connecting rods, g and h, with the lever, m, and the axes, f, f, f.

I also claim the arrangement of the wheels B and H, against yielding bearings, substantially as described for the purpose specified.

RE-ISSUES.

SINGLE MACHINE—James Cray, of Middleport, O. Patent dated Nov. 24, 1857 : I claim, first, The use of two or more froes, arranged substantially as before described, for the purpose of riving two or more bolts from the block of wood at the same time, thus preventing the tendency of the wood to eat out or split too thin at one end or at either side.

Second, The use of brace bars, or their equivalents, so arranged in combination with the froes, as that the froes will encase themselves between them, thus securing the perfect separation and delivery of the bolts from the block.

Third, The use of sliding side pieces, L L, with conveying slots, c, c, in combination with the upright grooves, d, d, in the frame in which the wrists of the shaving knives are inserted, for the purpose of effecting the gradual approximation of the shaving knives in the proper taper of the shingles.

Fourth, The combination of the lever, P, with its pin, R, the projecting cam, S, and cam, g, on the frame, L L, for the purpose of communicating the requisite relative motion to the vibrating feed board, O, the driver, N, and frame, L L, whereby one bolt only at a time of the two, three, or more riven by the froes, is driven outward through the shaving knives, no matter how short or thin the bolt may have been froed.

MAGNETIC PRINTING TELEGRAPH—R. E. House, of Binghamton, N. Y., formerly of New York City. Patent dated Dec. 1858. Re-issued Sept. 28, 1859. I claim, first, The employment of force derived from an electro-magnet, to govern and regulate a force derived from the use of compressed air or other fluid, substantially in the manner and for the purpose specified.

Second, I claim an electro-magnet constructed substantially as described, that is to say, when made up of a series of hollow stationary and moving magnets, arranged substantially as specified, so as to effect the movement of a rod or axle on which the latter are mounted, substantially in the manner set forth.

Third, I claim a valve substantially as is specified, in combination with any electro-magnet to move that valve, and a piston, or its equivalent, whose motion is effected by the pressure of air or fluid, whose action is controlled by such a valve, the combination being substantially as specified.

Fourth, I claim an endless band, acting as a reservoir of coloring matter, and arranged substantially in the manner and for the purpose specified, in combination with paper and a series of types and a spurred cylinder, so as to record characters when pressure is applied.

Fifth, In combination with a key-board at one locality, and a printing apparatus at another, or in combination with both a key-board and a printing apparatus at each locality, I claim a detent or stop moved by the hand of the operator for arresting the motion of a type wheel at one determined and fixed point when there is combined therewith a key corresponding, the parts are in proper position with that determined and fixed point, the detent and key being substantially as specified.

Sixth, I claim driving a type wheel of a printing apparatus by means of a friction connection substantially as described, between it and a prime mover, so that the motions of the former may be modified, or its

motions stopped without causing the motion of the latter to be stopped or modified.

Seventh, I claim combining with a wheel of a printing telegraph, which must at times stop, and at other times be in motion, a spring compressed by the action of the parts when in motion and exerting its force to start the wheel when released from any detent that may arrest its rotation, the combination being substantially as is specified to effect the purpose set forth, substantially as described.

Eighth, I claim causing the paper to be printed to approach the type which is to impress it, by means of a friction connection with a prime mover, so that the latter may remain in motion while the former is at rest, substantially in the manner set forth.

Ninth, I claim the apparatus substantially as set forth for governing the approach of paper to a type wheel, that at times moves, and at others stops, so that the apparatus which brings up the paper shall act for that purpose when the type wheel ceases to revolve for a longer period than usual.

Tenth, I claim, in combination with a type wheel of a printing telegraph, a spurred or toothed cylinder, substantially as is specified, the latter causing the paper to progress, as the purposes of printing by the types on the former may require, substantially as set forth, and this I also claim in combination with another surface, substantially as is specified to press the paper upon such spurs, in the manner substantially as described.

METALLIC PACKING FOR STEAM PISTONS—Daniel Lasher, of Brooklyn, N. Y. Dated June 30, 1857 : I claim the bent or folded springs inserted between the piston and packing rings, and taking an even and extended bearing around the interior circumference of said packing ring to cause the said packing ring or rings to take an uniform bearing on the interior of said cylinder, substantially as set forth.

I also claim two or more tiers of packing springs placed between the piston and the rings as aforesaid, when the said tiers of springs are so placed as to occupy alternate positions or break joints, as set forth.

ADDITIONAL IMPROVEMENTS.

REVOLVING FIREARM—F. D. Newbury, of Albany, N. Y. Dated June 29, 1858 : I claim in the construction and use of the trigger, the slot, f, also the feather, g, with the pin, p, substantially as described and for the purposes set forth in the specification.

CORN PLANTERS—Nathaniel Drake, of Newton, N. Y. Dated Feb. 2, 1858 : I claim, first, The rib, b, attached to the upper valve, constructed and operating as shown and described for the purpose stated.

Second, Extending the chains which operate the valves down under the pulleys, d, back of the axle, so as to obviate the slackening and taking up of the chains by the vibrations of the plows, D, and their attachments, as set forth.

SWING BOLT FOR FASTENING SHUTTERS—J. Gunner, Jr., of New York, N. Y. Dated Sept. 15, 1863 : I claim the attachment, J, Fig. 4, substantially as described, when used in combination with the lever, C, hub, E, and catch plate, D, for the purpose set forth.

Selling Future Inventions—Using Patented Machines.

We have received a letter from a correspondent who makes certain inquiries, (the nature of which are set forth in the above caption,) and as they relate to matters of deep importance to inventors, patentees, and assignees of patents, we will present them, with appropriate information on the subjects, in a brief article.

First—If an inventor and patentee assigns one half of his patent, and contracts in the assignment that all improvements on the machine secured in the patent, made thereafter by the inventor, shall belong to the party of the second part equally with the inventor and patentee, "would the assignee by virtue of his assignment have a legal binding claim on any new patent that might be granted to the inventor for an improvement in the machine, unless the claims were conveyed to him by a new assignment?"

A question of this very nature was decided in a trial before Judges Woodbury and Minot in October, 1846. The plaintiffs were John Nesmith and others against F. A. Calvert and others, to fulfill the agreement conveyed in an assignment giving the plaintiffs the right to all future improvements in certain machinery for preparing wool. The defendants had secured a second patent for improvements in the machine not embraced in the first patent. The court decided that a contract conveying a future invention was as legal and binding as one conveying a past invention. The decree was given in favor of the plaintiffs, and the inventor ordered to fulfill his contract, thus giving the plaintiffs a right to the improvements embraced in the second patent.

Second—"Can an inventor and patentee who has assigned one half of his patent be restrained by his assignee from using the machine covered by the patent in connection with an improvement secured by him in a subsequent patent?"

This is a question having reference to a license to use a patented machine, not an assignment. If the inventor, by the terms of his contract with his assignee, secured a license to run a machine on his own account, then he can alter it as he pleases, and use any improvement he chooses in connection with it. If the inventor has secured no such license, then he cannot independently run a machine covered by the assigned patent without the consent of his assignee, his joint partner in

the patent. Were the case otherwise, assignments of patents would be of no force nor value, for if an inventor could run one machine in opposition to his assignee, he could upon the same principle run a thousand.

Recent Patented Improvements.

The following inventions have been patented this week, as will be found by referring to our List of Claims;—

BREAD MACHINE AND OVEN—Messrs. W. R. Nevins and J. J. Yates, of New York, have invented an improvement in the machine for manufacturing loaf bread, ship biscuit and similar forms of this necessary article of food. The invention relates to machines for rolling dough into flat and continuous pieces, and conveying it on an endless apron under reciprocating cutters, by which it is cut into biscuit of any desired size and shape. The framework, to which is attached the oval or other shaped bar over which the endless apron passes, is extended beyond the frame of the machine, and over the hexagonal roller around which the metallic plates of the endless apron of the oven passes. The two aprons are given a corresponding intermittent progressive motion so as to enable the biscuit to be discharged automatically from one apron to the other, and an additional endless apron and rollers are placed above the endless apron for conveying the cut biscuit and scrap dough in such a manner as to separate the two after being cut.

The same inventors have also invented an oven for baking the biscuits, the improvement in which consists in arranging the endless apron for conveying the article to be baked within a horizontal chamber or oven having a metallic top and bottom, above and below which are horizontal flues communicating at their ends, for the passage of heated air, &c., from the furnace below; and dividing the lower flues and furnaces by a transverse bridge wall, in such a manner as to allow the heated air, &c., to be conveyed below the oven in both directions from the furnaces in the center to the ends, and then through the upper flue to the chimney. By these means an equable degree of heat is given to the upper and lower plates during the intermittent progressive motion of the endless apron which corresponds with the motions of the bread-making machine; and no smoke, ashes, or dirt can come in contact with the bread while baking. Both of these inventions have been patented abroad.

LAMP—The object of this invention is to obtain a lamp by which the flame may be supplied with a large or requisite amount of oxygen, without the employment of the glass chimney which has hitherto been used for this purpose. This lamp, although it will burn any of the substances usually employed, is more specially adapted for coal oil and other highly carbonaceous materials which consequently require a large quantity of oxygen for their combustion. The inventor is W. H. Racey, of St. Augustine, Fla. It would require a diagram to explain its construction.

CRACKER MACHINE—J. and J. C. Holyland, of Rochester, N. Y., have invented an improvement in the machines that are used for cutting out crackers from sheets of dough, and which are generally known as cracker machines. The invention consists in applying springs to rods which are connected with the cutter plate, so that the machine will be protected from all strain and the cutter plate made to act more efficiently than usual.

IMPROVED CAR SPRINGS—These car springs are prepared by coating or saturating a webbing of knit fabric with vulcanized india rubber, the webbing is then wound upon a mandrel in the form of a scroll while in a green state, so as to produce alternate layers of rubber and knit cloth around the mandrel, and a vulcanized rubber car spring is produced which has a uniform horizontal and vertical yielding movement, and is at once cheap and perfect. S. Peatfield, of Ipswich, Mass., is the inventor.