3d, The cylindrical screw piece, o, for adjusting the box, when formed to receive the bolt, E, in the manner and for the purposes described.

4th, The screws, h h, in combination with the stem piece, C, for adjusting the box, S, as herein shown and for the purposes specified.

5th, The stem piece, C, screw piece, o, eye bolt, E, and screws, b h, combined and operating substantially in the manner and for the purpose specified.

78,609.—CARRIAGE THILL.—Benjamin Robinson, Thomaston, Me.

I claim the arrangement of the cap, e, upon the projection, a, the said cap being secured by bolts, 1 and 2, in conjunction with the rubber piece, f, the rigid bolt of the shaft, the sides, 3, of the forked end of the shaft, the projection, b, and either with the elastic strip for the two purposes, of rendering the shaft holder adjustable and the shaft self-supporting, as described.

78,610.—COMPOSITION FOR PREPARING PAPER FOR TRANSFERRING STAMPS AND OTHER PRINTED MATTER.—Max Rosenthal, Philadelphia, Pa.

I claim a chemical compound, composed of the ingredients mixed in the proportions and quantities, and applied to unsized paper, as herein described and for the purpose set forth.

78,611.—HOE.—C. W. Saladee, Newark, Ohio, and J. S. Hall, Pittsburgh, Pa.

We claim the lips, w x and y, when formed substantially as described, as part of the hoe blade, in combination with the brace, B, substantially as and for the purposes set forth.

78,612.—GRATER AND SLICER.—C. W. Saladee, Newark, Ohio, and J. S. Hall, Pittsburgh, Pa.

We claim, 1st, The frame, A, table, B, and crank, D, substantially as described, in combination with the grater, G, substantially as and for the purposes set forth.

2d, The frame, A, table, B, and crank, D, substantially as described, in combination with the slicer, S, substantially as and for the purposes set forth.

The hollow plug, e, in combination with the holder, E, in the manner and for the purpose substantially as shown and described.

78,613.—COMPOSITION FOR FILLING THE PORES OF WOOD FOR VARNISHING.—Jacob Sheller, Wilmington, Del.

I claim the combination of the within-named ingredients, when mixed in the several quantities and proportions as herein described and for the purpose set forth.

78,614.—COTTON-SEED PLANTER.—Bryan Smith, Falkland, N. C.

I claim, 1st, The cylinder, B, constructed with arms, C, and pins, E, substantially as and for the purposes set forth.

2d, In combination with the cylinder, B, the coverer, K, constructed and operating substantially as specified.

3d, A cotton planter, having cylinder, B, cover, K, and plow, G, constructed and operating substantially as and for the purposes described.

78,615.—PRUNING SHEARS AND KNIFE.—John Spear and J. A. Hull, Carbondale, Ill.

We claim, 1st, The shears, consisting of the double curved blade, C, the blade, B, with the projecting thrust cutting edge or chisel, G, and the curved edge, D, arranged as described.

2d, In combination with the pruning shears herein described, the clasp, figs. 3 and 4, constructed and operating substantially as specified.

78,616.—CUTTER HEAD FOR PLANING MACHINES.—Albert T. Stearns, Dorchester, Mass.

I claim the combination of the slotted screw bolt with the cutter head and side cutters, constructed and arranged substantially as set forth.

Also, the cutter-head, constructed with the side cutters, arranged relatively to the center cutters, substantially in the manner and for the purpose set forth.

78,617.—EAVES TROUGH.—Wm. Stine, Elmore, Ohio.

I claim, 1st, The construction and arrangement of the bars, e and f, and cross bar, a, for holding an eaves trough, substantially as described.

2d, In combination with the above, the wire, b b, as and for the purpose set forth.

78,618.—MOP WRINGER.—D. J. Stone, Warwick, R. I.

I claim, 1st, The combination of the rolls, apron, and rod for operating the same, when arranged as herein set forth and for the purpose specified.

2d, The combination of the rolls, C F, and plates, x, as herein set forth and for the purpose specified.

78,619.—ELECTRO MAGNETIC ENGINE.—L. C. Stuart, New York city.

I claim, 1st, In the employment of a series of rotary magnets, arranged in pairs, and so connected that the magnetization of one set of magnets is effected before the demagnetization of the other, substantially as and for the purpose as described, in combination with a series of stationary magnets, when arranged and operating in the manner substantially as hereinbefore described for the purpose set forth.

2d, Alternately energizing and demagnetizing the electro magnets, without breaking the connection between the poles of the battery, in the manner herein before described.

3d, Conveying the induced or secondary current from the magnets as they are demagnetized, along with the current running to supply another set of magnets, substantially in the manner herein described for the purpose set forth.

4th, The employment of a series of adjustable conductors, substantially as described, whereby the speed and draft of the engine may be governed at pleasure, as hereinbefore set forth.

5th, The combination of the disks, a and b, and the conductors, e f g and b, when arranged and operating substantially as described.

78,620.—BENCH HOOK FOR CARPENTERS' BENCH.—Samuel Swan, New York city.

I claim the bed plate, E, constructed substantially as described and fitted with a hinged tongue, actuated by a spring, as set forth,

78,621.—BEEHIVE.—Homer Tuller, Ash Grove, Ill.

I claim, 1st, The box, or hive, A, constructed substantially as described, when used in combination with the honey boxes, B, as and for the purpose specified.

2d, The honey boxes, B, having the top side made of glass, and a series of slats at the bottom and one end, hinged in the manner substantially as and for the purpose set forth.

78,622.—MODE OF CONSTRUCTING LOOSE PRAIRIE FENCES.—Izaak Van Kersen, Kalamazoo, Mich.

I claim constructing a fence with wheels and axles permanently attached to one end of each panel, while the other end is connected by hooks and eyes, and the panels supported by braces, D D, the whole constructed, arranged, and operated substantially as and for the purpose set forth.

78,623.—MACHINE FOR GRINDING THE CUTTERS OF MOWING MACHINES.—Smith D. Weckman, Auburn, N. Y.

I claim, 1st, The combination, substantially as set forth, with a grindstone, of an oscillating adjustable clamping frame, suspended from overhanging arms, for the purposes set forth.

2d, The combination, substantially as set forth, with the frame, A, of the vertical detachable turning posts, C, the overhanging slotted brackets, H, the journals, the swiveling suspension rods, and the clamp bar, for the purposes specified.

3d, The combination, substantially as set forth, of a supporting frame, a bed plate turning on a pivot on said frame, a grindstone mounted on and turning with said bed plate, an adjustable overhead supporting frame, and a suspended oscillating clamping frame, for the purposes specified.

78,624.—GRINDING MILL.—A. H. Wagner, Staunton, Va.

I claim the spider, V, the rollers, U W, the inclines, X X, the rod, Y, and nut, a, when arranged and operating in the manner and for the purposes specified.

78,625.—WATER ELEVATOR.—Alvah Walker, Oswego, N. Y.

I claim the curb, C, pulley, G, pulley or pulleys, H, and cord, F, arranged horizontally, with the fastening, I, all combined and arranged substantially as and for the purposes described and shown.

78,626.—CULTIVATOR.—William Walton, East Palestine, O.

I claim attaching the handles, D, directly to the wings, B, and providing an adjustable brace in the curved bars, H, in the manner and for the purpose substantially as herein set forth,

78,627.—COUNTER SHAFTING.—H. C. Weihe, Philadelphia, Pa.

I claim, 1st, The parallel counter shaft, B B', sliding spur wheel, H, fixed pinion, I, and the loose cone pulley, E, when combined and arranged substantially as shown and described.

2d, The parallel counter shaft, B B', fixed pulley, G, loose pulley, F, sliding feather, a, collar, b, shifting lever, K, and the loose cone pulley, E, when combined and arranged substantially as shown and described.

3d, The parallel counter shafting, B B', loose pulley, F, fixed pulley, G, sliding feather, a, loose cone pulley, E, feather, c, sliding gear, H, and the pinion, I, when combined and arranged substantially as shown and described.

4th, The main shafting, A, parallel counter shafting, B B' pulley, C, pulley, D, loose cone pulley, E, feather, a, loose pulley, F, and the fixed pulley, G, when combined and arranged as herein shown and described.

78,628.—CURTAIN FIXTURE.—George M. White and Charles S. Meeker, New Haven, Conn.

We claim the lever, K, constructed so as to receive the cord, and permit its free passage therethrough while in a depressed position, or hold the cord, as the case may be, substantially as herein set forth.

78,629.—ELECTRO-MAGNETIC ENGINE.—William Wickersham, Boston, Mass.

I claim, 1st, In electro-magnetic engines, the arrangement of the magnetic bars in an endless chain, having alternate magnetic bars and links of non-magnetic metal, the chain being so arranged in the engine that all the magnetic bars can pass successively through the same helix or column of helices substantially as described, and for the purpose set forth.

2d, In electro-magnetic engines, the construction of two chain gears on parallel shafts, of suitable form and distance apart to receive the electro-magnetic chain, all arranged in such manner that the gears and chain can revolve together, substantially as described.

3d, In electro-magnetic engines, the arrangement of two or any desirable number of chain gears on the same shaft, with the corresponding number of electro-magnetic chains, all working concurrently together and communicating their power to the same shafts, substantially as described, and for the purpose set forth.

4th, In electro-magnetic engines, out of a thin ribbon shaped strip of metal, the formation of two or more helices, as described, and so arranging them in the engine, in columns or otherwise, that each shall receive a different series of magnetic bars through it, and so further arranging them that when the circuit is closed through one helix, it shall be closed through all of the series thus formed of said strip, substantially as described.

5th, The circuit cylinder, with its spiral conductors so formed and in such connection with the helices, that it shall continue the same relation between the closed circuits and the position of the magnetic bar, or as near as may be, as it advances through the column of helices.

6th, Such disposition of these spiral conductors around said circuit cylinder that one of them will perform the same function for each magnetic bar as it enters a column of helices, or for all the magnetic bars of a series which enter a series of said columns at the same time, substantially as described and for the purpose set forth.

7th, Such an arrangement of the spiral conductors, e e e, on the sides of the cylinder, in combination with its movable arrangement on its shaft, as will close the circuits in such manner in its middle position that there will be no tendency of the magnetic bars to move in either direction, and will open the circuits in such manner in its upper and lower positions as will give motion to the magnetic bars, but in diverse directions, the upper position in one direction, and the lower position in the opposite direction, substantially as described and for the purpose set forth.

8th, In combination with the cylinder, the device, consisting of the sliding bar, o, and the spring, q, for moving the circuit cylinder to and holding it in any position needful to stop the engine or running it in either direction, as described.

9th, Making each alternate helix, of those formed of the same strip of metal, coil around in a diverse direction from the others, in such manner that when an electric current passing through a line of helices, so formed of the same strip of metal, produces a north polarity in one end of a magnetic bar, placed in any one of said helices, a south polarity will be produced in the same end of a magnetic bar placed in either of the adjoining helices of the same line, the electric current flowing in the same direction through all the helices in the same column, substantially as and for the purpose described.

10th, Such an arrangement of the columns of helices on the opposite sides of the engine that through any two columns, one on the back and the other on the front of the engine, through which the same electro-magnetic chain passes, the electric current shall flow in diverse directions, giving north polarity to the upper end of a magnetic bar in one, while it gives south polarity to the upper end of the magnetic bars in the other, and *vice versa*, all substantially as described and for the purpose set forth.

78,630.—RAILWAY RAIL CHAIR.—William Wickersham, Boston, Mass.

I claim, 1st, In a railway rail chair, the screw cylinders, a a, when constructed to work or operate automatically, substantially for the purpose set forth.

2d, In combination with the screw cylinders, the springs, d d, as described, and for the purpose set forth.

3d, The construction of the screw cylinders, a' a', with the spaces, f, and wedge, g, in combination with the chair, substantially as described and for the purpose set forth.

4th, In combination with the screw cylinders, the metallic strips, i i, as described and for the purpose set forth.

78,631.—HERDING AND SECURING CATTLE.—Jesse Wilkinson (assignor to Horace Ballard Wilkinson), Urbana, Ill

I claim the combination of the windlass for stretching the rope, D, the said rope, the post, C, and trusses, B B, resting upon the ground, together with the traversing block and pulley, E, and adjustable stops, G, substantially as and for the purpose set forth.

78,632.—BRICK MACHINE.—C. A. Winn, Lock Haven, Pa.

I claim, 1st, A complete and portable brick machine, composed of the steam boiler, A, cylinder, C, clay mill, D, constructed as described, combined and arranged in one portable apparatus in the manner and for the purpose herein set forth.

2d, The formation of the annular chamber, e, of the clay mill, D, with the elevated chambers, g g, the spiral steam tube, G, as connected with the boiler, and arranged in the annular chamber E, and the stationary perforated steam pipes, H H, passing directly from the boiler through the clay mill, horizontally, all combined in the manner and for the purpose herein set forth and described.

78,633.—FLOOD FENCE.—Valentine Wood, Richmond, Ind.

I claim the fence panel, A, the lower bar, B, of which is pivoted to posts, C, and which is supported in an inclined position by braces, D, when arranged in relation to the embankment, E, to operate substantially as described.

78,634.—BRICK MACHINE.—Charles D. Wrightington, Fair Haven, and Benjamin P. Rider, Chelsea, Mass.

We claim the secondary motion given to the screws by the cam ledge, H, and the arm, K, in addition to the primary motion for feeding down the clay into the forming tube by the gear wheels, for the purpose of smoothing the clay and finishing out the filling of the tube, substantially as described.

Also, in combination with the mold wheel, P, and pressing followers, 9 10 11 12, the rising and falling table, Y, under the molding wheel, and the delivering apparatus, s t u v, when arranged and timed in their motions and periods of rest, to operate together substantially as described.

78,635.—PAVEMENT.—Arcalous Wyckoff, Elmira, N. Y.

I claim, 1st, A pavement, formed of blocks of wood of irregular forms and uniform length, resting upon a plank floor, and having the intermediate spaces filled with a fibrous material and gravel or sand and coal tar, substantially as set forth.

2d, The arrangement and method of forming foundations between the blocks of wooden pavements, by forming a base of saw dust, tan bark, or analogous fibrous material, and placing thereupon gravel or sand, to fill up such spaces, in the manner and for the purpose herein described

78,636.—APPARATUS FOR EXTINGUISHING FIRES.—William Mullally, Boston, Mass.

I claim, 1st, An apparatus for extinguishing fires, composed of the vessel, A, the foraminous shelf, e, or its equivalent, and the escape cock, f, the vessel A being provided with a filling aperture, and the whole being constructed, adjusted, and operating essentially in manner and for the purpose as herein shown and described.

2d, The employment of the foraminous shelf or its equivalent, as before set forth and explained.

REISSUES.

2,956.—MACHINE FOR PUNCHING LEATHER.—James M. Bent, Wayland, Mass. Patented October 16, 1866.

I claim, 1st, The combination of a die with a punch, substantially as and for the purposes described.

2d, The punch and die, when made to revolve in combination, substantially as described.

3d, The mechanically revolving punch, substantially as described.

4th, In combination with a cutting punch, a clearing pin, substantially as described.

5th, So constructing the parts so as to cause the die to adapt itself to different or varying thicknesses of leather, substantially as described.

2,957.—MOP HEAD.—Colby Brothers and Company, Waterbury, Vt., assignees, by mesne assignments, of Harvey Murch, Division A. Patented June 14, 1853.

I claim, 1st, The combination of a socketed cross head with a binder, having the two ends thereof united directly to each other, the combination being substantially such as described.

2d, The combination of a socketed cross head with a binder, having the two ends thereof united directly to or with each other, and a single fastening for holding the whole binder directly to the handle itself, in such position as to clamp rags, etc., the combination being substantially as described.

3d, The combination of a socketed cross head with a handle and a binder, having the two ends thereof united to or with the handle itself, the combination being substantially such as described.

4th, The combination of a cross head with a handle and a binder, having the two ends thereof united directly together, and secured in clamping position on the handle proper, so as to sustain or aid in sustaining the cross head, the combination being substantially such as set forth.

2,958.—MOP HEAD.—Colby Brothers and Company, Waterbury, Vt., assignees, by mesne assignments, of Harvey Murch. Division B. Extended seven years. Patented June 14, 1853.

I claim, 1st, The combination, with a cross head and binder of a ratchet fastening, the combination being substantially as described.

2d, The combination of a ratchet fastening, handle, binder, and cross head the combination being substantially such as set forth.

2,959.—EYELETING MACHINE.—William N. Ely, Stratford, Conn., assignee, by mesne assignments, of Luther Hall. Dated May 14, 1867. Division A.

I claim, 1st, A movable head or carrier, in combination with the punch and set, or either of them, constructed, arranged, and operating substantially as described.

2d, A head or carrier, so constructed and operated as to allow the punch and set to be alternately depressed by the same lever, substantially as described.

3d, So constructing the mechanism that the punching table and setting bed shall reciprocate laterally, and alternately occupy the same place, substantially as and for the purposes described.

4th, The reciprocating punching table, in combination with a stationary work supporting table, when constructed, arranged, and operated as described, so as to be moved to and from the punch, and under the material, substantially as set forth.

5th, The striking lever, so constructed and arranged as to cause the set to pick up the eyelet while the punch is making the hole for its reception, substantially as described.

6th, The setting die, so constructed and operating as to pick up the eyelets from the chute, and present them to the place of insertion, substantially as described.

7th, The reciprocating setting bed, constructed, arranged, and operating automatically, substantially as described.

8th, Feeding the material forward by means of the setting bed or holding point, substantially as described.

2,960.—EYELETING MACHINE.—William N. Ely, Stratford, Conn., assignee, by mesne assignments, of Luther Hall. Patented May 14, 1867. Division B.

I claim 1st, A feeding instrument, which engages with the work feeds forward, disengages, retracts, and engages again, in combination with a punch or set, or both, substantially as described.

2d, A presser foot, for holding the work to the table, in combination with a punch, or set, or both, substantially as described.

3d, The spring presser foot, in combination with the feeding mechanism, arranged and operating with an eyeleting mechanism, substantially as described.

4th, An adjustable work feeding mechanism, in combination with the mechanism for punching and eyeleting, substantially as described.

5th, Punching the holes, supplying, inserting, and setting the eyelets, adjustably spacing the distances, holding and feeding forward the work, by means of devices so combined as to effect this object automatically, substantially as described.

2,961.—EYELETING MACHINE.—William N. Ely, Stratford, Conn., assignee, by mesne assignments, of Luther Hall. Patented May 14, 1867. Division, C.

I claim, 1st, A hopper for holding the eyelets, in combination with agitating devices, substantially as described, and a chute, provided with an enlarged receptacle or dish at its lower end, substantially as and for the purposes set forth.

2d, A hopper and chute, constructed and arranged substantially as described, so that the eyelets shall be delivered from the hopper, flaring end down, and presented to the set, flaring end up, substantially set forth.

3d, A hopper and chute, arranged substantially as set forth, in combination with a set and work feeding device, substantially as described.

2,962.—EYELETING MACHINE.—William N. Ely, Stratford, Conn., assignee, by mesne assignments, of Luther Hall. Patented May 14, 1867. Division D

I claim, 1st, The combination of movable carrier, D, with both punch, E, and set, F, or either of them with lever, K, constructed, arranged, and operating substantially as described.

2d, The combination of movable carrier, D, with both punch, E, and set, F, or either of them, lever, K, and cam, L, constructed, arranged, and operating substantially as described.

3d, The combination of movable carrier, D, set, F, and setting bed, S, substantially as described.

4th, The combination of movable carrier, D, punch, E, and sliding plate, Q, substantially as described.

5th, The combination of movable carrier, D, punch, E, set, F, sliding plate Q, and bed, S, substantially as described.

6th, The movable carrier, D, constructed, arranged, and operated, substantially as described.

7th, The combination of levers, V and T, and pin, S, substantially as and for the purposes described.

8th, The combination of plates, Q and L, arranged and operated substantially as described.

9th, The combination of levers, V and T, pin, S, and screw, w, substantially as and for the purpose described.

10th, The combination of lever, T, block, U, lever, V, and eccentric wheel, X, constructed, arranged, and operating substantially as described.

11th, The combination of hopper, B', chute, A', dish, h', and set, F, substantially as described.

12th, The combination of presser foot, N, spring, O, with both punch, E, and set, F, or either of them, and table, A, substantially as described.

2,963.—MACHINE FOR GRINDING PLOW CASTINGS.—Joshua Gibbs, Canton, Ohio. Patented October 4, 1853. Extended seven years.

I claim, 1st, A frame or carriage, beneath a grindstone or polishing wheel, supported at one end by any suitable device, and at the other by the hands of the operator; said frame being capable of a lateral, longitudinal, and oscillating adjustment during the process of grinding, for the purpose of adapting the stone to uneven, irregular, or plane surfaces of articles to be ground or polished, as herein set forth,

2d, In combination with a carriage, supported and operated as above described, beneath a grindstone or polishing wheel, a cord or rope, or its equivalent, for relieving a portion of the weight of the frame in the hands of the operator, as herein set forth.

2,964.—LUBRICATING DEVICE.—Barton H. Jenks, Bridesburg, assignee of Mathew Senior, Frankford, Pa. Patented March 17, 1868.

I claim, 1st, Lubricating a shaft which is required to receive endwise motion also motion about its axis by means substantially as described.

2d, The device for lubricating the feathered shaft, C D, from each side of the feather, through holes in the tubular journal, B, and the hole, f, in the hollow cap, g, as herein described.

3d, The combination of the lubricating device with a shaft which moves longitudinally independent of its sleeve, and turns with said sleeve, substantially as described.

2,965.—WELL TUBE.—F. A. Mack, Niles, Mich. Patented Sept. 11, 1866.

I claim a well tube in which the openings or incisions, e e, are cut or formed from the inside, so as to leave a diminishing external projection from the inside, in the manner and for the purpose substantially as specified.

2,766.—MACHINE FOR GRINDING SCALE PIVOTS.—Frederick Meyer, Newark, N. J. Patented May 14, 1867.

I claim, 1st, The combination of the two adjustable revolving grinding wheels, G, with the reciprocating carriage, E, provided with head blocks, I, notched rests, p, and clamping device, M, for holding the scale beam, arranged substantially as described, whereby the knife edges or pivots of scale beams are ground to great accuracy of adjustment, as set forth.

2d, The construction and arrangement of the longitudinally sliding carriage C, reciprocating carriage, D, and carriage, E, as herein set forth for the purpose specified; and

3d, Adjusting the scale pivots to be ground upon both sides by means of the set screws or pins, h l, secured to the arm, l, of the sliding carriage, E, and bar, H, upon the frame, A, substantially as herein set forth.

2,767.—MODE OF ATTACHING ORNAMENTAL HEADS TO NAILS. Turner, Seymour, & Judd (assignees of F. J. Seymour), Wolcottville, Conn. Patented June 26, 1866.

We claim an ornamental picture-nail head, made with a sheet metal body or back, having within it a screw thread for the nail, substantially as specified.

DESIGNS.

3,061.—FLOOR-CLOTH PATTERN.—Hugh Christie, Morrisania, assignor to D. Powers & Sons, Lansingburg, N. Y.

3,062.—KNITTED FABRICS.—J. P. Delahenty, Cohoes, N. Y.

3,063.—BURIAL CASKET.—J. M. Hall, Philadelphia, Pa.

3,064.—B.—CLOCK CASE.—G. B. Owen, Winsted, Conn.

3,065.—STREET-LAMP POST.—R. H. Smith, Pittsburgh, Pa.

3,066.—PERFUME BOTTLE. — Henry Whitney, East Cambridge, Mass.

3,067. — TOILET BOTTLE. — Henry Whitney, East Cambridge, Mass.

3,068.—LAMP FOOT. — Henry Whitney, East Cambridge, Mass.