

78,471.—TWEER.—William H. Myers (assignor to Sylvester Mathias), Baltimore, Md. I claim an escape pipe, D, or its equivalent, independent of the duct which conveys the heat to the fire, descending from the center of the tweer, to convey away a-b-s, dust, etc., from bottom of the fire, and to admit a direct draft when the fire is not in operation, substantially as set forth.

with the vibrating upright shaft, B, lever, D, and stop, C, as shown and described. I claim the swivel clevis, A, reversible plowshare, A, or cultivator share, E, vibrating shaft, B, lever, D, and stop, C, notched bar or standard, e, with wheel, K, and plates, F, all constructed and arranged in combination with a plow frame, as shown and described.

5th, The combination of the pipe, U, with the fire chamber, D, and generating chamber, G, whereby the gases of combustion may be directly admitted into the steam space, substantially as set forth. 78,515.—HARVESTER CUTTER.—Thomas J. Christy, Olney, Ill. Antedated May 25, 1868. I claim the combination of the chain sections, b, formed with projecting heels, b', for both driving and guiding the blades, a, and links, c, bolted to the sections, b; the plow, d, driving the chain, through the medium of the projecting heels, b'; the central bar, g, with ledges, g', forming guide ways for the heels, b; the finger beam, s, with upturned flanges, e', and the cast plate, f, when the said parts are constructed, arranged, and employed in the manner and for the purpose specified.

78,540.—LUBRICATOR FOR STEAM ENGINES.—James Ross, North Cambridge, Mass., assignor to himself and Ferdinand Fairbanks, New York.
I claim the construction in a lubricator of the character herein specified, of the cock, C, and its seat, D, with their openings arranged substantially as described, whereby provision is made or varying the extent of steam condensing surface in the oil cup or reservoir of the lubricator, and thereby regulating the flow of oil or grease, essentially as herein set forth.

78,541.—FUEL REGULATOR FOR MILLS.—John Ross, Brooklyn, N. Y. Antedated May 25, 1868.
I claim the use of the feed regulator, A and J, to close partially or wholly the throat of a conical mill, in the manner described.
2d, The combination of the cone J, with its wings, I, to direct the grain into the throat of the mill.

78,542.—PLOW CLEVIS.—Roger Sandiford, Joliet, Ill.
I claim, 1st, The double segmental clevis, a, when constructed, operating, and arranged substantially as and for the purposes set forth.
2d, The transverse oscillating clevis, e, when constructed and arranged as and for the purposes described.

78,543.—COMPOSITION FOR DEFLATING HIDES.—Peter G. Schlosser, Middletown, assignor to himself and A. P. Barr, Baltimore, Md.
I claim, 1st, The composition, substantially as above described, for deflating dry hides.
2d, The composition, substantially as above described, for deflating green hides.

78,544.—COMPOSITION FOR COVERING ROOFS, PAVEMENTS, WALLS, ETC.—John See, Philadelphia, Pa.
I claim a composition of ingredients herein named, substantially as and for the purposes as specified.

78,545.—PROCESS OF TREATING PETROLEUM FOR THE MANUFACTURE OF LUBRICATING OILS.—Gideon O. Spence (assignor to himself, A. R. Williams, and J. S. Lathrop), Titusville, Pa.
I claim, 1st, The use of the first chemical ingredient herein specified, in the manufacture of lubricating oil from petroleum or coal oil, or their products, for the purpose specified.
2d, The use of the second chemical ingredient herein specified, in the manufacture of lubricating oil from petroleum or coal oil, or their products, for the purpose specified.
3d, The use of the third chemical ingredient herein specified, in the manufacture of lubricating oil from petroleum or coal oil, or their products, for the purpose specified.
4th, The use of the fourth chemical ingredient herein specified, in the manufacture of lubricating oil from petroleum or coal oil, or their products, for the purpose specified.
5th, The use of the fifth chemical ingredient herein specified, in the manufacture of lubricating oil from petroleum or coal oil, or their products, for the purpose specified.
6th, The use of the second and third chemical ingredients herein specified in combination, in the manufacture of lubricating oil from petroleum or coal oil, or their products, substantially as and for the purposes specified.
7th, The use of the five chemical ingredients, herein specified, in combination, in the manufacture of lubricating oil from petroleum or coal oil, or their products, substantially as and for the purposes specified.

78,546.—FISHERMAN'S NIPPER.—Eli F. Stacy, Gloucester, Mass.
I claim, as a new article of manufacture, a moulded elastic gum "nipper," as described, and for the purpose set forth.

78,547.—TELEGRAPH APPARATUS.—Joseph B. Stearns, Boston, Mass.
I claim, 1st, In an electro magnet coil, constructed of two opposing or neutralizing conductors, making each of the conductors of the same length, and giving them each an equal number of turns, as and for the purpose set forth.
2d, A key or other circuit breaker, the back stop of which is connected with the ground by a wire, in which is placed a rheostat or other resistance, and for the purpose set forth.
3d, Combining an electro magnet constructed as described, or in any other manner, to produce either complete or partial neutralization of its cores, with a key or circuit breaker having a connection between the back stop, or its equivalent, and the ground, through a rheostat or other resistance, as and for the purpose described.
4th, Combining an electro magnet constructed as described, or in any other manner, by which either complete or partial neutralization of its cores is produced, with a key or circuit breaker having no connection between its back stop and the ground, as specified.
5th, In combination with an electro magnet constructed substantially as described, the key, A, the key or circuit breaker, C, local battery, B, and rheostat, F, all constructed and operating substantially as and for the purpose set forth.

78,548.—TELEGRAPH APPARATUS.—J. B. Stearns, Boston, Mass.
I claim, 1st, The combination of a relay consisting of two electro magnets, so arranged as to act upon the same armature post, in opposite directions, with a key that shall close one circuit before or at the same time that it opens another, when the same are constructed and made to operate substantially as described.
2d, The combination of the relay constructed substantially as described, the source of power, S, and rheostat, R, when the whole are connected and made to operate substantially in the manner and for the purpose set forth.
3d, In combination with the rheostat, R, the double relay, when the latter is so constructed as to effect the finer adjustments of the force acting upon the armature or armatures, as set forth.
4th, So arranging the several parts of the apparatus that the resistance offered to the current from the battery at either end of the line is always the same, whatever may be the position of the key at the opposite end.
5th, In combination with the key, S, constructed as described, the rheostat R, inserted between the key and the ground, substantially as and for the purpose described.

78,549.—FRUIT DRYER.—Alden S. Stevens, Attica, N. Y.
I claim the combination of the hollow cylinder, A, open at both ends, and provided with cutting teeth, al, at its upper edge, with the conducting bag, F, attached to its lower edge, and manipulating rod or pole, C, connected to its side, as and for the purpose set forth.

78,500.—AX HANDLE.—Benj. D. Stevens, Decorah, Iowa. Antedated May 18, 1868.
I claim, 1st, In setting india rubber or similar elastic substance in the eye of axes, hammers, and analogous tools, when placed in the position for the purpose substantially as described.
2d, The wedge, C, when constructed and used as and for the purpose set forth.

78,551.—LIQUID METER.—James Sutherland, Brooklyn, N. Y.
I claim, 1st, A liquid meter composed of two or more cylinders, each an independent piston, when these latter are controlled by valves operated so that either one piston or connected pair or set of pistons is or are made to actuate the valve which controls the other piston or connected pair or set of pistons, substantially as specified.
2d, The combination of the cylinders, C' and D', with their pistons and valves, so arranged and operating as that either one set of pistons to said cylinders are controlled by the motion of the valves which control them, when the other set of pistons are midway of their stroke, or thereabouts, essentially as herein set forth.
3d, The combination of the cylinders, C' and D', with their pistons, yokes, H H', tappets, L L', arms, M M', and valves, J J', for operation together, and in connection with suitable inlet and outlet passages, substantially as shown and described.

78,552.—WAGON FOR ADVERTISING.—George W. Thompson, New York city. Antedated May 25, 1868.
I claim, 1st, The employment of the vertically arranged revolving drum of advertisements or signs, substantially as and for the purposes herein shown.
2d, The arrangement of the pulley, J, with the guide pulleys, L, L, and the pulley, I, for transmitting motion to the axle, F, substantially as and for the purpose stated.

78,553.—TURN TABLE.—James K. Thompson (assignor to himself and Wm. B. Howard), Chicago, Ill.
I claim the bearing frame, G, consisting of bearing circle, H, cross beams, k, k, and truss bearing beams, M M, each of the above said parts constructed as described, and the whole arranged and operating substantially as and in the manner herein set forth and specified.

78,554.—MACHINE FOR MAKING TREENAIL.—Nathaniel L. Tompkinson, New York city.
I claim the combination of the slotted slide, b, holding the adjustable knife a, the movable gage rest, g, its connecting rods, i, sliding screw, h, the two screw wheels, c and s, with the gage disk, k, constructed and arranged substantially as hereinbefore described.

78,555.—SAUSAGE STUFFER.—John P. Troxell (assignor to himself and Samuel H. Davis), Hancock, Md.
I claim the single discharge opening for the cylinders, A A, valve, E, and hollow journals, a, a, combined and operating substantially as and for the purpose set forth.

78,556.—VALVE AND STEAM PASSAGE.—George Verry (assignor to himself and O. G. Graves), Norwich, Conn.
I claim, 1st, The arrangement of the receiving and exhaust ports B B' C C', and cut-off plugs, E E, substantially as herein described.
2d, The recesses, A A, in combination with the ports, B B' C C', substantially as and for the purpose described.

78,557.—TIDE MOTOR.—Wm. W. Virdin, Baltimore, Md.
I claim, 1st, A floating vessel or buoy, R, constructed with water passages through it, and provided with a cut-off, B', and a water wheel, D, said buoy being arranged in a suitable passage way for water, in such manner that the wheel will be caused to turn both by the ebb and flow of the tide, substantially as described.
2d, The buoy, B B', constructed with bulkhead apartments, substantially in the manner and for the purposes described.
3d, The chamber or chambers, J, in combination with a boy, B, having an aperture or apertures, I, and constructed substantially as described, for the purpose of receiving water to be raised by the elevator, J, substantially as described.
4th, The endless chain of double chambered buckets, in combination with a perforated drum, G H I, substantially in the manner and for the purposes described.

78,558.—CIDER AND WINE MILL.—James Walton, Sunfish, Ohio.
I claim the arrangement of the hoppers, P Q, grinding rolls, B B', apron, F, rolls, G G' G'' I I', incline, M, concaves, N and O, and receiver, R, substantially as and for the purpose set forth.

78,559.—APPARATUS FOR DYEING.—Miles Waterhouse, Passaic, N. J.
I claim the combination and arrangement of the several parts, substantially as and for the purposes shown and described.

78,560.—ICE CREEPER.—William C. Wells, Philadelphia, Pa.
I claim a "creeper" composed of a piece of leather or other soft material, with metal "spurs" fastened thereon, by means of metal "washers," and by riveting, when said piece of material is intended to be worn beneath the sole of the shoe, and is attachable to and detachable from the shoe, substantially as shown and described.

78,561.—HOE.—Isaac N. Wood, Fall River, Mass.
I claim the improved hoe as made with the short, open, tubular blade, combined or provided with an angular nose, arranged with respect to such blade and its Shank, substantially as specified.

78,562.—MANUFACTURE OF TABLE WARE.—Howell W. Wright (assignor to Reed & Barton), Taunton, Mass.
I claim, 1st, The within-described alloy of nickel and copper, or any other substantially the same, all as and for the purposes set forth.
2d, The improved table ware, made substantially as described.

78,563.—CARRIAGE SEAT.—John H. Adams, Portland, Me.
I claim, 1st, The swinging hinged or pivoted bar, b, either with or without the spring, h, in combination with the projection, e, the said bar, b, being attached, as set forth, to the carriage sides, and capable of being fastened thereto, as set forth, and the projection, e, to the carriage seat, as and for the purposes described.
2d, The clamp, f, in combination with the projection, e, on the seat, as and for the purposes described, the said clamp, f, being secured as herein set forth.

78,564.—CONSTRUCTION OF SHEET METAL CONDUCTOR PIPE.—William Austin (assignor to himself and William Opydyke), Philadelphia, Pa.
I claim a water conductor or pipe, made of corrugated sheets of metal, so as to yield to the internal pressure caused by the freezing of the water therein, substantially as described.

78,565.—VISE.—Quimby S. Backus, Winchendon, Mass.
I claim the method of protecting the screw shafts of vises with the sectional tubes, h i and k, arranged and operating substantially as described.

78,566.—HAY LOADER.—Addison Barker, Camanche, Iowa.
I claim the drum, F, arranged outside of the wheel, G, in combination with the sheaves, C and O, and stop, L, for taking in the slack of the rope, B, essentially as shown and described.

78,567.—TOY.—John H. Barnes, Troy, N. Y.
I claim the combination, in a toy whistle, of the flanges, a' and a'', with a cord and ring fastened by a loop, or equivalent, substantially as described and for the purpose specified.

78,568.—HARNESS BUCKLE.—Alma Bedford, Coldwater, Mich.
I claim a harness buckle, provided with the cross bar, E, and loop, D, when constructed as herein described, as a new article of manufacture.

78,569.—COMPOSITION FOR DESTROYING INSECTS IN FRUIT TREES.—Benjamin Best, Dayton, Ohio.
I claim the mode of protecting trees, by the application of the hereinbefore described composition to bands of fibrous material surrounding the trees, substantially as described.

78,570.—CAR SEAT AND CHAIR.—William N. Bragg (assignor to himself, W. H. Trainor and J. B. Winston), Richmond, Va.
I claim, 1st, The combination of the seat, A, with the bars, A1 and A2, and rock shaft, a3, and the bell crank, C1 and rod, c, to operate the pawl, C, substantially as and for the purpose specified.
2d, The combination of the above parts, A A1 A2 a3 C1 and C, with the hook, b, of the leg, with the notched flange, d1, for the purpose specified and as substantially described.

78,571.—SHAFT COUPLING.—Levi Bronson (assignor to himself and James Brayley), Buffalo, N. Y.
I claim the guard flange, C, C, of the ring, A, in combination with the forked shaft, E, and head bolts, D D, held by keys, p, p, the whole arranged as described and operating in the manner and for the purpose set forth.

78,572.—MODE OF CONSTRUCTING IRON POSTS FOR RAIL FENCES.—Henry S. Brooks and Jacob S. Lehman, Marietta, Pa.
We claim the intervening rail supports, c, with their perforated flanges, x, in combination with the two round iron rods, A A', top and bottom plates, d d', and bed plate, B, all arranged and applied in the manner and for the purpose specified.

78,573.—TELEGRAPHIC REPEATER.—W. G. Bronson, Wells-ville, Ohio.
I claim, 1st, So combining the local circuit, influencing and operating a registering, repeating, or signal instrument in an electro-magnetic telegraph system, with a relay or relay instrument on a main circuit, in aid system as that said local circuit shall be open when the main circuit is closed, and vice versa, all substantially in the manner and for the purpose herein set forth.
2d, An electro-magnetic telegraph relay or receiving instrument, so constructed as that the contact of its armature lever with a suitable connecting contact point to close a local circuit, shall be broken, and the local circuit thereby opened when the receiving magnet becomes excited, all substantially in the manner and for the purpose herein set forth.
3d, The combination and arrangement of the armature lever of a telegraphic repeating instrument with the wires of the local circuit, and a connecting and conducting post in said circuit, so as that the local circuit shall be closed through said lever and post when the magnet attracting said lever is inactive, all substantially in the manner and for the purpose herein set forth.
4th, So combining the connecting device in a repeating instrument, whereby the main circuit is closed, with an insulated pin upon the armature lever thereof, as that said main circuit shall be opened when the magnet of the instrument is excited, all substantially in the manner and for the purpose herein set forth.
5th, In an improved connecting and conducting post, M, in my repeating instrument, when constructed with a horizontal arm, a, carrying an adjusting screw and connecting pin, r, and combined with an elastic metallic strip, p, from a second contact pin post, L, to open and close an electrical circuit, all substantially in the manner and for the purpose herein set forth.
6th, The telegraphic switch, P, constructed of an insulated pivoted plate, provided with metallic strips, each so disposed thereon as that, by a proper alignment of the contact points, the receiving magnet may be excited by two detached pins or points beneath the plate communicating with the wires of electro-magnetic batteries, to be broken by turning the plate upon its pivot, so as to change the alignment, all substantially in the manner and for the purpose herein set forth.
7th, My improved key or circuit breaker, so constructed as that, when at rest, the main circuit connects therewith shall be closed thereby through its contact base plate, and an insulated anvil, substantially in the manner and for the purpose herein set forth.

78,574.—PADDLE WHEEL.—James Burson, Yates, Ill. Antedated May 23, 1868.
I claim, 1st, The plates or carriers, h, for holding the guide rods, D F, in four angular positions, in combination with the ways, L N U W and J K Y M, all arranged and operating substantially as shown and described.
2d, The combination of four guide rods to either bucket, with separate rails or tracks to either pair of said rods, for operation together, substantially as and for the purpose or purposes herein set forth.

78,575.—CLOTHES DRYER.—J. M. Butters, North Fryeburg, Me.
I claim the combination of the bars, D D', with brackets, A and A', pivots d d, and projections, a, a, and back, B, the whole constructed as described and operating as set forth.

78,576.—DIE FOR MAKING AXLE NUTS.—A. B. Candee, Hamden, and L. S. Taylor, Southington, Conn., assignors to Zeta Nut Company.
We claim the combination of the cut-off block, K, gripping dies, F and H, die, L, and punch, a, all constructed, arranged, and operating in the manner substantially as described.

78,577.—SPOOL GUARD.—W. C. Cleveland, Cambridge, Mass.
I claim the spool guard, C, provided with projections, a, so constructed as to clamp the spool between them, and to serve as axles for the spool to rotate upon, substantially as herein set forth.

78,578.—GAS BURNER.—Seth L. Cole, Brooklyn, N. Y.
I claim adjusting the cap, A, upon the jet or burner by means of the cogged bar, c, and ratchet wheel, d, or a section thereof, or by any device that will allow the cap to be turned, or to be simply raised or lowered, by which the flow of gas to the jet is regulated, for the purpose substantially as described and shown in the drawings.

78,579.—THRILL COUPLING FOR CARRIAGES.—Monroe M. Copp, Abion, N. Y.
I claim the convex ended cap, C, provided with the square shoulder, b, and with a key, b', which is recessed to receive one half of the draw bolt, h, and form with the recess of the bar, A, a complete eye, and a shield to exclude dust from the same, in combination with the forked thrill iron, B, and jack, A, arranged and operating substantially as and for the purposes set forth.

78,580.—FOOT LIGHT FOR THEATERS.—Coleman Defries, London, Great Britain.
I claim the exclusive use of an improved foot light, constructed and arranged substantially as herein described, and shown on the accompanying sheet of drawing, whether the mechanism for raising and lowering colored mediums be of any kind, and applied to the purposes set forth.

78,581.—MANUFACTURE OF TOE CALK AND BLANK FOR THE SAME.—Thomas Dooley, South Boston, Mass.
I claim a calk or calk blank having a relative disposition of iron and steel, produced and shaped substantially as described.

78,582.—SIDE GEAR FOR THRASHING MACHINE.—John Duchesne, Lacon, Ill.
I claim, 1st, The swiveling post, k, for the purpose of rendering the connection between a horse-power and separator adjustable, substantially as described.
2d, The combination of the swiveling post, k, spring arm, m, and notched foot plate, h, as and for the purpose set forth.
3d, The combination of the swiveling post, k, with the gearing, l i c d and shaft, e, as and for the purpose set forth.
4th, The cap, n, in combination with the gearing, c d, as and for the purpose set forth.
5th, The slotted case, o, in combination with the gearing, l i, and swiveling post, k, as and for the purpose set forth.

78,583.—STREET SCRAPER.—Abraham Dyson, St. Louis, Mo.
I claim, 1st, The wheels, f' f', and N, blocks, e e' e'' e''', shafts, d d', and frame, D, with their connecting chords, x x', and elastic bands, l l', l l'', of a street scraping machine, all arranged relatively to each other and the rest of the machine, substantially as and for the purpose shown and specified.
2d, The lever, O, with its arm, v, link, s, frame, D, and cam, r, of a street-scraping machine, all arranged relatively to each other and the remaining parts of the machine, substantially as and for the purpose shown and specified.
3d, The combination of the scrapers, 1 2 3 4 etc., and h h', with the frames, D E and F, all constructed, arranged, and operating substantially as and for the purpose shown and specified.
4th, A street-scraping machine, combining the devices above mentioned, when constructed, arranged, and operating substantially as and for the purposes shown and specified.

78,584.—CHIMNEY CLASP.—C. F. Espick, Plymouth, Ind.
I claim the sections, A and B, constructed, substantially in the manner specified, of any required size, and bound together around the upper end of a chimney, as and for the purpose set forth.

78,585.—DIE FOR CUTTING THE TEETH OF METALLIC COMBS.—Caleb Foster (assignor to Elias Brown), Wappinger's Falls, N. Y.
I claim the combination of the male and female dies, A B, follower or plunger, D, spring, E, or its equivalent, and the cutting lips, b, b, on the male die, all arranged for joint operation substantially in the manner as and for the purpose specified.

78,586.—BREAD KNIFE.—John Frisch, Albany, N. Y.
I claim, 1st, The employment of roller, H, when arranged to regulate the thickness of the slice, and also to yield to the pressure of the knife, substantially as and for the purposes described.
2d, In combination with the above, spring, m, bars, B C, slides, g, g, and roller, h, all arranged substantially in the manner and for the purpose set forth.

78,587.—CULINARY VESSEL.—Chauncey W. Fuller, Earlville, Ill.
I claim in combination with the boiler, A, diaphragm, B, and cover, D, the vessels, C C, and perforated plate, E, when so constructed, and arranged that the drip from the condensed steam shall fall outside of and not into the vessel, substantially as described.

78,588.—COOKING APPARATUS.—J. M. Gale and I. M. Avery, New York city.
We claim, 1st, The construction of the diaphragm, C, consisting of the concave and conical disks, c, alternately perforated, and connected as described substantially as set forth.
2d, The combination of the removable diaphragm or diaphragms, C, with the cylinder, a, and lugs, l, substantially as and for the purposes set forth.

78,589.—CHURN.—A. E. Gillilan, Marian, Iowa.
I claim the dashers, E, E, and adjustable slotted board, B, as constructed in combination with arms, f f, g, g, crank shaft, D, when all are arranged and operated as and for the purpose set forth.

78,590.—WAGON SEAT.—Lewis Graham, Plymouth, Ill.
I claim the levers, B B, slotted and hinged at their inner ends to the wagon seat, A, with the stationary headed bolts, E E, and tubular rubber springs, D D, arranged and used as and for the purposes set forth.

78,591.—COMBINED SQUARE AND CALIPER.—C. W. Guerrant, Leakville, N. C.
I claim the combination of the bars, A and B, and slotted arm, C, arranged and operating as described for the purposes set forth.

78,592.—CEMENT FOR FASTENING DOOR KNOBS, AND FOR OTHER PURPOSES.—N. B. Hall and Herbert Jones, (assignors to Thomas Kennedy), Brantford, Conn.
We claim the cement, produced by the combination of materials and in the proportions herein fully set forth and described.

78,593.—WASHING MACHINE.—Safford V. Hall, McGrawville, N. Y.
I claim the spiral springs, g g, the grooved side gages, h, h, and the cap piece, i, in combination with the fluted roller, e, and rubber board, a, all constructed and operated substantially as described.

78,594.—LUBRICATOR.—Timothy Holland and J. T. Cody, Cincinnati, Ohio.
We claim the combination and arrangement, substantially as described, of the globe, A, socket, B, rubber stem, C, I D, chamber, H, h, and valve F G, g, as and for the purpose set forth.

78,595.—OVER SHOE.—H. L. Hotchkiss (assignor to L. Candee & Co.), New Haven, Conn.
I claim the application of the binding, a, to the shoe, and so as to protect the edge of the fabric, in the manner and for the purpose substantially as specified.

78,596.—STILL FOR SPIRITS.—Gottlob Kaiser (assignor to himself and Vosnack & Steins), New York city.
I claim, 1st, The within-described combination of two stills with the mash heater, and recider, a, d column, and deaerator, and a condenser, connected and arranged for joint operation, substantially as and for the purposes herein set forth.
2d, In connection with the above, introducing the mash into the mash heater gradually or by small increments so as to maintain a uniform or nearly uniform temperature in the heating vessel, substantially as and for the purpose herein specified.
3d, In a mash heating vessel, B, constructed and arranged substantially as herein specified, the within described provision for agitating the contents, by the injection of steam into the same, in the manner and with the advantages herein set forth.
4th, Cooling the dephlegmator with water from the condenser, by means of connections and cocks, arranged as shown, so that the cold water is economized, and the cooling of the dephlegmator is gradual and uniform, all as and for the purposes herein set forth.

78,597.—SHOE FOR SEPARATOR.—Michael Laufenburg, Two Rocks, Cal.
I claim the combination of the screw, I with the two inclined sleeves, C and C', vibrating in alternation, substantially in the manner and for the purposes herein described.

78,598.—GATE.—John Lee, Massillon, Ohio. Antedated May 27, 1868.
I claim, 1st, The blocks or revolving levers, d' d', and hinged fulcrum, b, attached to top rail, B, of gate, and hand levers, d, d, when used in combination with the same, constructed and operating as described and for the purposes set forth.
2d, The sliding latch, F, and inclined plane, l, and rope, a, for locking and unlocking the gate, constructed as described, and operating as set forth.
3d, The weight box attached to the top rail, F, and operating in slot, f, on pivot bolt, e, constructed as described and operating as set forth.
4th, The sliding pivot and guide blocks, l, for keeping the gate in a vertical line while being operated, constructed as described and for the purposes set forth.
5th, The levers, a' a', with slots, m, and concave or convex ends, and convex or concave in part, so to correspond, constructed and operating as described and for the purposes set forth.

78,599.—TOOTH BRUSH.—Thos. Maitland, Williamsport, Pa.
I claim the hollow head, B, and bristles, made of india rubber, and combined with the handle, A, having a tenon on its end, all constructed and used substantially as specified.

78,600.—APPARATUS FOR GENERATING GAS.—R. J. Malcolm, Cincinnati, Ohio.
I claim, 1st, Carbureting air by reversing the vessels or chambers, x and z, substantially as described.
2d, The combination of vessels or chambers, x and z, so that as the compound vessels revolved or reversed, air is drawn in and forced out alternately, as described.
3d, The valves, f' g' g' h' h' i', in combination with their respective pipes when used as set forth.
4th, The floats, d d', and cross bar, C', or its equivalent, as specified.
5th, The combination of the cylinder, A, frame, B, and floats, d d', when operating as and for the purpose specified.

78,601.—COMPOSITION TILE OR SLAB FOR FLOORS, ETC.—I. Marsh, Jr., Milton, Pa.
I claim a composition tile or slab for pavements, etc., consisting of the composition surrounding and supported or strengthened by an interior platform or framework, substantially as described.

78,602.—PUMP.—C. S. McMahan, Centerville, Ind.
I claim the piston, P, in combination with valves, C and D, when the latter are provided with hosing appendages, as described, and the whole arranged and operating substantially as and for the purpose set forth.

78,603.—BREACH LOADING FIRE ARM.—Samuel Norris, Springfield, Mass., and Wilhelm Mauer and Paul Mauer, Oberndorf, Württemberg, assignors to Samuel Norris.
We claim, 1st, The combination of a main spring, k, formed substantially as herein described, with the handle of the breech block, C, and arranged to propel the firing pin or other striking device of a breech-loading fire-arm, substantially as and for the purpose herein set forth.
2d, The firing block, C, handle, j, spring, k, and catch, m, of a breech-loading fire-arm, constructed, combined, and operated in such manner that the piece is locked by turning the said handle, C, substantially as herein set forth.
3d, Securing the breech block, C, by means of the recess, k3, and catch, m, substantially as and for the purpose herein set forth.

78,604.—WEIGHING SCOOP.—J. K. O'Neil, Kingston, N. Y.
I claim, 1st, The hollow handle, B, to the scoop, for the purpose of receiving the balance, D, substantially as herein set forth.
2d, Securing the balance to the handle when not in use for weighing, substantially as specified.
3d, So shaping the balance that it will form a counterpart to the handle, and compose part of it when brought down thereto, substantially as described.
4th, The arrangement of the notches, c c, or their equivalent, upon the scoop, in relation to the ball and balance, substantially as and for the purpose set forth.
5th, Attaching the balance to the scoop ball by the extension of the balance spring itself, as herein specified.
6th, The combination and arrangement of the weighing rack, t, with shaft r, pin, s, and the balance spring, substantially as and for the purpose herein set forth.
7th, The elastic washer, n, around the index pivot, and pressing upon the index, substantially as and for the purpose herein specified.
8th, The elastic washer, n, around the index pivot, and pressing upon the index, substantially as and for the purpose herein specified.

78,605.—MANUFACTURING FRUIT-CAN BODIES.—Jacob Pfau, Cincinnati, Ohio.
I claim, 1st, The mode of manufacture of a creased and open-mouthed fruit can body in one piece, substantially as described.
2d, An open-mouthed and creased fruit can, whose body and the shoulder for receiving the wax are formed of one piece, in the manner set forth.

78,606.—REFRIGERATOR.—Enoch Piper, Camden, Me.
I claim, 1st, A refrigeratory apparatus, one or more of the inner walls of which are deep, narrow vessels of thin metal, to receive the freezing mixture, substantially as described.
2d, The employment, in a refrigeratory apparatus of one or more receptacles, B D, for the freezing mixture, constructed of thin metal, in the form and proportions substantially as shown and described, to serve as partitions between the sides, as constructed.
3d, The combination of the shelves, F F, open at the sides and top, and having a bar across the top, substantially as described, with a refrigeratory chamber, C, formed substantially as described.

78,607.—LAMP BURNER.—A. H. Platt, Philadelphia, Pa.
I claim the combination and arrangement of the concentric wick tubes or plates, 2, 3, with open spaces, b, b, therein, the movable wick regulator, 4, perforated plate, k, and apron, a, substantially as and for the purposes herein specified.

78,608.—HANGER FOR SHAFTING.—John Richards, Cincinnati, Ohio.
I claim, 1st, The stem, C, formed to receive the lugs, d, substantially as shown.
2d, The combination of the adjusting screws, h, h, and eye bolt, E, when used substantially as herein shown and for the purposes specified.

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

4th, The screws, h, b, 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, e, bolt, e, and screws, h, b, combined and operating substantially in the manner and for the purpose specified.

78,609.—CARRIAGE TRILL.—Benjamin Robinson, Thomaston, Me.
I claim the arrangement of the cap, e, upon the projection, a, the said cap being secured by bolts, l 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, h, and either with the elastic strip for the two purposes, or 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, as 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.
3d, 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 Seiler, 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 purpose set forth.
2d, In combination with the cylinder, B, the cover, 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 set forth.

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, and 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, h, 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 hereinbefore 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 h, 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.—Isaak 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 whole, by the rollers, 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. Wackman, 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, G, the overhanging slotted brackets, H, the journals, I, 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, l, 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. Weibe, 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, collar, b, shifting lever, K, 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, collar, 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 be 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 any 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 if it advanced 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 diverse directions from the others, in such manner that 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 SKURING 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 traveling 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, clasp 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 F. Rider, Chelsea, Mass.
We claim the secondary rotary pivoted 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 rest, to operate together substantially as described in their motions and periods of rest.

78,635.—PAVEMENT.—Arcalous Wycroff, 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 interstices and 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 for 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 Mullaly, Boston, Mass.
I claim the apparatus for extinguishing fires, composed of the vessel, A, the foraminous shelf, e, or its equivalent, and the escapement, f, the vessel A, being provided with a hilling 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, 1863.
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 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 bars, 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 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 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, 1863.
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 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 operated as to pick up the eyelets from the cutting, 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 eyeletting mechanism, substantially as described.
4th, An adjustable work feeding mechanism, in combination with the mechanism for punching and eyeletting, 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 and chute, constructed and arranged substantially as described, so that the eyelets shall be delivered from the hopper, having end down, and presented to the set, having end up, substantially set forth.
2d, 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 with 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, T, 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 FLOW CASTINGS.—Joshua Gibbs, Canton, Ohio. Patented October 4, 1863. 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 hand 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 a 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, 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, l, l, secured to the arm, I, of the reciprocating carriage, E, and hat, 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 23, 1863.
We claim an ornamental picture-nail head, made with a sheet metal hook or rack, 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. Delahanty, 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.

PATENTS.



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On filing each application for a Patent, except for a design \$15
On issuing each original Patent \$20
On appeal to Commissioner of Patents \$20
On application for Rescissio \$20
On application for Extension of Patent \$50
On granting the Extension \$50
On filing a Disclaimer \$10
On filing application for Design (three and a half years) \$10
On filing application for Design (seven years) \$15
On filing application for Design (ten years) \$20

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