

Messrs. Hecker and others throughout the country, is the acid constituent of Horsford's self-raising bread preparation and of the Rumford Yeast Powders, which have come into such extensive use. In these preparations the properties usually lost with the bran in bolting, are restored to the flour, greatly increasing its nutritive value.

DOUBLE-WALL ICE PITCHERS.

The following letter from Professor S. Dana Hayes, State Assayer of Massachusetts, contains facts that should be read by all persons that have occasion to buy or use double-wall ice pitchers. Messrs. Reed & Barton, the patentees and manufacturers of the Seamless Lined Ice Pitchers, are the oldest and one of the largest and most celebrated manufacturers of silver plated ware in this country. The old lining, made in two pieces of different kinds of metal, and now in common use, renders water deleterious to health in four hours, and in twenty-four hours sufficient poisonous metals have been dissolved to impart taste to the water. This result is surprising, and it is still more so that attention has not been sooner called to this source of ill health.

STATE ASSAYER'S OFFICE, No. 20 State street, Boston, Jan. 23, 1868.

Messrs. REED & BARTON, Taunton, Mass. Gentlemen: I have been much interested in investigating the corrosion of linings for ice pitchers, and the consequent poisoning of the water, after standing in them.

The lining, or inner chamber, of the greater part of the ice pitchers in common use is made from two different metals or alloys. As it is necessary that the bottom should be quite strong, to resist the blows from the ice when carelessly thrown in, this part has been made of nickel silver, copper, or other hard metal, while the sides of the chamber are generally made of britannia or "white metal," the two parts being soldered together and then silver-plated.

The corrosion of this lining and solution of the metals in water naturally results from this mode of manufacture; because these different metals, in contact, under water, form a galvanic arrangement. If a silver coin be placed above the tongue, and a piece of zinc below, allowing the edges to come in contact, a metallic taste will be perceived in the mouth, from the galvanic action and solution of one of the metals. And the action is similar in these linings, only that it is not so violent at first.

Several of these linings, made as above and in common use, have been examined; some of them are very badly corroded, and it is noticeable that the solder has been first attacked. In one of these a nearly pure water was left for several hours that the effect might be noted.

In 1 hour the water contained traces of lead and copper. In 4 hours the water contained 0.7 grain of lead and copper. In 12 hours the water contained 1.6 grains of lead and copper. In 24 hours the water contained 3 grains of lead and copper. And, with a natural well water, this action is still more energetic.

It is hardly necessary to tell you, that metallic poisoning is one of the greatest enemies we have to contend with in the struggle for life, and it is common knowledge that lead and copper are highly poisonous and accumulative.

I have also submitted your new patent lining to careful chemical tests. This is formed from one piece of metal, without any seams, or soldering, the bottom being strengthened on the outside. There is no galvanic action here.

Analyses—This lining was nearly filled with the same water as the other, the temperature and all other conditions being the same in both cases. After standing for forty-eight hours the water did not contain a trace of metal. It was then boiled in the lining for an hour, and analyzed twice during that time, but it was still perfectly free from metals of any kind.

It is certainly fortunate that you can make these linings from one piece of metal, to take the place of the others, as a safe ice-pitcher is a great luxury.

Respectfully, S. DANA HAYES, State Assayer of Mass.

Polishing Powder for Gold Articles.

Dr. W. Hofman has analyzed a polishing powder sold by gold workers in Germany, which always commands a very high price, and hence, it may be inferred, is well adapted for the purpose. He found it to be a very simple composition, being a mixture of about 70 per cent of sesquioxide of iron and 30 per cent of sal-ammoniac. To prepare it, protochloride of iron, prepared by dissolving iron in hydrochloric acid, is treated with liquid ammonia until a precipitate is no longer formed. The precipitate is collected on a filter, and without washing, is dried at such a temperature that the adhering sal-ammoniac shall not be volatilized. The protoxide of iron precipitate at first becomes charged with sesquioxide.

The Steam Man.

This automaton, which has furnished a number of paragraphs for the press, is on exhibition at 538 Broadway, New York city, nearly opposite the site of Barnum's Museum; but owing to some objection on the part of the owner of the hall, he is not permitted to "travel on his muscle," but is hung in slings and merely "marks time," as our military friends would say. We understand, however, that his managers have decided to test his powers more effectually, when we shall probably have more to say of him.

ELECTRICAL JEWELS.—One of the latest Parisian novelties is a scarf pin for gentlemen's wear in which a curious application of electricity is introduced. The pins are finished with imitation human heads the eyes of which are made to open or shut at the will of the owner. The electro-motor is a simple voltaic element of zinc and carbon, or zinc and platinum, the whole being inclosed in a small brass case conveniently carried in the vest pocket. The carbon is fixed in a vessel partly filled with a solution of sulphate of mercury, and the zinc is attached to the lid of the case. No electrical action is generated as long as the case is carried perpendicularly, but if laid on its side a current is formed.

OFFICIAL REPORT OF PATENTS AND CLAIMS

Issued by the United States Patent Office.

FOR THE WEEK ENDING MARCH 10, 1868. Reported Officially for the Scientific American.

PATENTS ARE GRANTED FOR SEVENTEEN YEARS, the following being a schedule of fees:—

Table with 2 columns: Fee description and Amount. Includes items like 'On filing each caveat', 'On filing each application for a patent', etc.

In addition to which there are some small revenue-stamp taxes. Residents of Canada and Nova Scotia pay \$500 on application.

Pamphlets containing the Patent Laws and full particulars of the mode of applying for Letters Patent, specifying size of model required, and much other information useful to inventors, may be had gratis by addressing MUNN & CO., Publishers of the Scientific American, New York.

75,234.—BOAT DETACHING BLOCK.—Nelson B. Adams, San Francisco, Cal.

I claim in combination with a block, the jaws, E E, with the long arms, F F, the short levers, H H, with the pivots, A A, for the knee joint, the operating lever, J, having its fulcrum at G, and pivoted to the knee joint, I, the whole constructed, combined and operating as a detaching apparatus, substantially as and for the purposes herein described.

75,235.—LEAKAGE MEASURE, ALARM, AND INDICATOR.—Thomas P. Akers, New York city.

I claim, 1st, Providing for indicating the height of leakage water in the hold of a vessel by means of weights of greater specific gravity than water, suspended from a pulley, so that one of the weights shall rise and descend with the rise and fall of the water, and the other make similar movements, but in a reverse manner, and by its movements communicate motion to registering, indicating, and alarm mechanism, substantially as described.

2d, The combination of a leakage measure which consists of two weights, and a chain, which is arranged to unwind from a pulley as fast as it winds upon the same, with an alarm, or with an indicator, or with a combined alarm and indicator, substantially as described.

3d, The combination of the wheels, L L, chain, F, weights, G G, pulley F, and disks, C C, substantially as and for the purpose described.

4th, The combination of a leakage measure, operating substantially as described, with the figured disks, the alarm devices, and gearing, L L and M, substantially in the manner and for the purpose described.

5th, The curved piece, H, constructed and applied to the hammer arm substantially in the manner and for the purpose described.

6th, The combination of the weight, G, cylinder, H, pendulum, K, and double-acting poppet valve, substantially as and for the purpose described.

7th, Arranging all the gearing, the alarm devices, the indicating disks, and the pulley of the weight chain or cord, upon a frame or spider of the case, A, substantially as described.

75,236.—FLOOR CLEANER.—Abraham Armstrong, Newburg, Ohio.

I claim in a floor cleaner, as described, adjusting the rubber and intervening plates by means of the set screws, for the purpose set forth.

75,237.—COLTER HOLDER.—Jefferson Aughe, Dayton, Ohio.

I claim the combination of the plates or disks, C, colter, B, beam, A, and bolt, e, substantially as described and for the purpose specified.

75,238.—APPARATUS FOR BURNING CRUDE PETROLEUM.—Henry Baldwin, Titusville, Pa.

I claim, 1st, A reflector, g, as arranged to surround the supply pipes and a portion of the heater, and used in combination with the same, substantially as and for the purposes set forth.

2d, The reflector, f, as arranged with relation to the heater, when used in conjunction with the same, substantially as and for the purposes set forth.

3d, The supplementary reflector, g, and blow pipe, h, as arranged with relation to the reflector, f, and heater, a, substantially as and for the purposes set forth.

75,239.—BOLT THREADING MACHINE.—Wm. B. Bement, Philadelphia, Pa.

I claim, 1st, For opening and closing the dies while the machine is in motion, two or more cranked or eccentric spindles, f, each carrying a toothed segment or plim, adapted to internal teeth in a loose disk, which is controlled partly by a spring, d, and partly by the friction clamp herein described, or any equivalent to the same, the whole being combined with the spindle of a screwing machine substantially as specified.

2d, The cutting dies, I, secured to the blocks, n, n, but admitting of an adjustment independently of the latter, substantially as specified.

3d, The pump, with its piston and spring, in combination with the spindle, B, and its eccentric or cam, substantially as and for the purpose herein set forth.

4th, The within-described lever, spring pawl, i, and rack, arranged for operating the sliding head or plate, substantially as set forth.

75,240.—PROCESS OF PURIFYING IRON AND STEEL.—John F. Bennett, Pittsburg, Pa. Antedated Feb. 28, 1868.

I claim, 1st, The use of carbonic acid gas, either alone or mixed with atmospheric air, or with other gases or vapors, when introduced into the body of molten iron or other metal, in combination with or immediately following the pneumatic process, for the purpose of removing sulphur, phosphorus, and any other impurities which will form chemical combinations with the oxygen of the carbonic acid, and deposit the carbon substantially as hereinbefore described.

75,241.—METRONOME.—Hiram S. Blunt, New York city.

I claim the adjustable rings or plates, A A A' A'', separated or united, in the form of a drum, with rings or stops, B B B', secured to and forming a part of the movable shaft, C and B, in combination with the index or hand, d, and with or without the dial, D, for the purpose of indicating the number of beats in a bar of music, in the manner substantially as described and shown in the drawings.

75,242.—MODE OF PRESERVING EGGS.—Joseph Brakeley, Hordentown, N. Y.

I claim the preservation of eggs of hens or other fowls in the manner substantially as set forth above, that is to say, by drying them within their natural integument.

75,243.—BRICK CARRYING CAR.—John K. Caldwell, Pittsburg, Pa.

I claim, 1st, A series of tables, b, resting and turning on recesses in the supports, a, in a brick drying car, as arranged for the purpose set forth.

2d, A brick drying and bearing car, the supports, a, having ledges, e, inclined, c', and tenons, e, constructed and used substantially as and for the purposes set forth.

3d, The combination of the tables, b, supports, a, ledges, c, inclines, c', and tenons, e, in a brick drying car, when constructed and arranged as and for the purpose specified.

75,244.—LETTER BALANCE.—Benjamin Chambers, Jr., Washington, D. C.

I claim the knife edges in holes passing through the lugs, as herein described, and covered, the covering plate at one end being worked, whereby the knife edges are kept in place, and can be readily removed when it is required to remove them.

75,245.—PROCESS OF DEODORIZING AND REFINING SACCHARINE AND OTHER FLUIDS.—William Clough, Cincinnati, Ohio.

I claim the process of refining and deodorizing saccharine and other fluids herein specified.

75,246.—ROCKING CHAIR.—C. W. Conant, Gardner, Mass.

I claim the arrangement as well as the combination of the spring, D, and the arch piece, C, with the chair seat, A, the rockers, c, c, and the supporting frame, B, thereof, the whole being to operate substantially as described.

75,247.—MOP PRESS.—L. S. Covey and John Duffy, St. Croix county, Wis.

We claim the box or receiver, E, constructed and operated substantially as described, in combination with the plunger, C, the lever, D, and the cross beam, F, and grooves, e, e, all constructed and arranged substantially as and for the purpose described.

75,248.—GUN LOCK.—John F. Crabtree and Wm. N. Crabtree, Visalia, Cal.

We claim, 1st, The pawl piece, B, in combination with the trigger, E, and the lever, F, acted upon by the main spring, G.

2d, The spring catch, I, in combination with the lever, M, with the inclined oblong slot, O, for the purposes described and in a manner substantially as set forth.

75,249.—DEVICE FOR RAISING AND LOWERING WINDOW SASHES.—John D. Cramer, San Francisco, Cal.

I claim the recess and arrangement of the several parts of my device, namely, the combination, A, with the slotted plate, B, and the plate, C, connected to the shaft, G, by the curved piece, e, substantially as described.

75,250.—HAME.—Benjamin Crawford, Allegheny City, Pa.

I claim, 1st, Making fastenings for connecting harness tugs or traces to harness, adjustable by an eye through the inner or forward end of each, such eye to be operated on a staple, d, or d', in connection with proper locks or supports, e, e', the same being attached to the harness or lames plate, or holding such fastenings at the proper point of adjustment, substantially as and for the purposes described.

2d, The shoulders, I, constructed on the fastenings, f, f', in combination with the supports, e, e', for the purpose of relieving the strain which would otherwise come on the staples, d, d', substantially in the manner above described.

75,251.—CLOTHES DRYER.—H. Du Bois, Marlborough, N. Y.

I claim, 1st, The combination in a folding clothes dryer, of the arms, B B, latches, a, a, and springs, b, b, with the central polygonal shaft, A, arranged and constructed substantially as and for the purposes herein described and set forth.

2d, The combination of the arms, C C, and legs, D D, with the shaft, A, arranged and constructed to fold up, substantially as herein described and set forth.

75,252.—MACHINE FOR DISTRIBUTING FERTILIZERS.—Jesse Edwards, Medford, N. J.

I claim the arrangement of the hopper, A, distributing shaft, G, wheels, C and D, and plows, B, as and for the purpose specified.

75,253.—MOP HEAD.—Richard W. English, Buffalo, N. Y. I claim, 1st, The cross head, H, and shank, B, in combination with a screw ferrule, K, provided with a slot, R, as and for the purposes substantially described.

2d, The thumb nut, C, in combination with the parts, E E, and collar, D, substantially as and for the purposes described.

3d, The employment of the binding wire, for holding the collar, D, and parts, E E, together, as herein shown and set forth.

75,254.—BEDSTEAD FASTENING.—Bartholome Essig, Sacramento, Cal.

I claim the plate, C, for attaching the side rail of a bedstead to the post, having an arm, e, an oblique lug, b, so as to be firmly secured to the post by the tension on the end rail, substantially as described.

And in combination with the plate, C, the plate D, fastened to the side rail, having a lug or key, g, fitting into a slot or groove on the plate, C, substantially as and for the purposes described.

75,255.—HAY KNIFE.—Green Fenton, Streetsboro, Ohio.

I claim the handle, A, spring, C, pin, a, arm, c, and blade B, all constructed and arranged in the manner as and for the purpose specified.

75,256.—LAMP BRACKET.—E. L. Ferguson (assignor to himself and Charles B. Clark), Buffalo, N. Y.

I claim, 1st, The combination of the two jointed arms, A A', provided with suitable jaws for holding lamps of different sizes.

2d, The india-rubber ring, E, in combination with the said arms, arranged substantially in the manner set forth.

3d, The combination of the arms, A A', ring, E, and cam, f, or equivalent, for distending the jaws of the clamp, substantially as set forth.

4th, The peculiar construction of the jaws, D D, provided with shoulder, m, flange, n, and contracted bottom, as shown and described, for holding lamps and containing different forms and sizes.

5th, The peculiarly formed casting, C, constructed and arranged with the plate, B, and bracket arm, A, so as to secure the latter in its socket, and also form a receptacle for matches, in the manner shown and described.

75,257.—HARNESS TRIMMING.—Milton A. Fisk (assignor to Edward M. Wesson), Springfield, Mass.

I claim as a new article of manufacture, a rosette or harness trimming, when constructed as herein described and for the purpose specified.

75,258.—PLATING SPOONS AND OTHER ARTICLES.—Marshall L. Forbes (assignor to the Meriden Britannia Co.), West Meriden, Conn.

I claim the mode, substantially as before set forth, of coating spoons and similar articles with a regulated unequal thickness of the plating metal by immersing different portions of the article for different periods in the bath of the electroplating apparatus with which the article is connected.

Also the combination of a holder, adapted to confine the article to be coated, with regulating mechanism to hold the articles partially immersed to the required extent in the depositing bath, substantially as before set forth.

Also the combination of a holder, adapted to confine articles, with mechanism for tilting the article, so as to vary the extent of immersion in the depositing bath, substantially as before set forth.

75,259.—MACHINERY FOR PRINTING YARN.—John Forrest (assignor to himself, John Archibald, and John Taylor), Lawrence, Mass.

I claim the combination, as well as the arrangement of the two carriers for carrying skeins of yarn, in the manner described, with one or two series of printing wheels, composed of annular disks, their color rollers and cellular troughs, the whole being provided with mechanism to operate them substantially as and for the purpose specified.

Also the combination of the drying cylinder or apparatus, the two carriers above, one or two series of printing wheels, their color rollers and cellular troughs, the whole being provided with mechanism to operate them, substantially as and for the purpose specified.

75,260.—KNITTING MACHINE.—Guy P. Fuller, Adrian, Mich.

I claim the combination of the finger, A, the disk or dial plate, B, the geared wheel, C, the pinion, D, or their equivalents, the frame E, the ratchet F, the lever, G, the friction wheel, H, the nut, I, the shaft, J, the plate, K, when constructed substantially as described, for the purposes herein set forth.

75,261.—MILKING MACHINE.—B. F. Graves, Groton, Mass.

I claim the arrangement of the pump, with the flexible tubes, teat cups, glass tubes, stop cocks, devices for adjusting the teat cups to the udder of the cow, all constructed and arranged substantially as described and for the purposes specified.

75,262.—MODE OF ATTACHING ANIMALS TO CARRIAGES.—Henry B. Hale and Thomas Flagler, Grass Lake, Mich.

We claim the construction of a draft or extension bar, with or without joints, in connection with pulleys, straps, chains, and rods, arranged in the manner and for the purposes specified.

75,263.—HARVESTER RAKE.—Thos. Harding, Springfield, O.

I claim an automatic device which opens the switch, g, at each revolution of the rake and reel, and at the same time is under the control of the driver to make the raking only when it is necessary, in combination with a revolving reel and rake on a harvester, substantially as set forth and described.

The collar, O, provided with the clutch pin, n, and lug, o, in combination with the tripper, l, clutch switch, e, and switch, g, whereby the driver while on his seat may depress said collar and throw the clutch pin, n, out of connection with the head, L, to stop the rake from sweeping the grain from the platform, as desired.

Working the switch, g, automatically by means of the tripper lever, i, and a lug attached to a collar surrounding and revolved by the rake shaft, substantially as set forth.

Arranging the tripper, l, between the guide way and the rake-arm head upon the box or bearing of the rake shaft, substantially as set forth.

The combination and arrangement of the switch, g, provided with the arm j, and spring, k, with the tripper, l, and lug, o, or its equivalent.

75,264.—COMPOSITION FOR STUFFING LEATHER.—John Hallettine, Warren, N. H., assignor to himself and Peron Noyes, Lowell, Mass.

I claim the combination of the herein-described ingredients in about the proportion specified, for the purpose and in the manner substantially as described.

75,265.—INVALID BEDSTEAD.—Wm. Heath, Bath, Me.

I claim the combination of the recesses, K K L, or their equivalents, with the frame, A, the two frames, D E, and mechanism for moving an d depressing or operating the back frame, E, substantially in manner described.

Also, the combination of the folding legs, M M, the footed sectors, and their arms, ff, the frame, A, and the parts, B C D and E, arranged and connected substantially as specified.

75,266.—SHANK SPRING.—Ed. Heaton, New Haven, Conn.

I claim the construction of shank springs, when cut or stamped out of the sheet without scrap or waste, substantially as specified.

75,267.—COTTON-BALE TIE.—John W. Hedenberg, Chicago, Ill.

I claim a cotton-tie buckle, made and constructed substantially in the manner described.

75,268.—GANG PLOW.—Chas. Hess, Lyons City, Iowa.

I claim, 1st, The slot, T, in the end piece, and axle to adjust the tongue.

2d, The iron beams, when used in a gang plow.

3d, The combination and arrangement of the parts, when constructed and used as above set forth.

75,269.—STRAW CUTTER.—L. B. Hoyt, Cedar Falls, Iowa.

I claim, 1st, The balance wheel, B, when provided with recessed and beveled arms, f, r, and curved blades, e, attached thereto, in combination with the beveled gears, e, f, the interchangeable feed rollers, C C D, and crank, g, as and for the purpose specified.

2d, The within-described arrangement of the intermediate spokes, r, of the balance wheel, with reference to the knife-carrying spokes, r, thereof, and the interchangeable feed rollers, C C, substantially as and for the purpose specified.

3d, The method, herein-described, of graduating the feed by the detachable or interchangeable rolls, C, of different sizes, arranged to operate underneath the yielding roll, D, and operated by the crank, g.

75,270.—CAR COUPLING.—Winfield H. Hoover, North Benton, Ohio.

I claim the combination of the pivoted drop, E, link, D, pin, C, and draw-head, B, when operated by the bar, F, with its side levers, H H, all constructed and used substantially as and for the purposes set forth.

75,271.—PREPARATION OF ACID PHOSPHATE OF LIME.—E. N. Horsford, Cambridge, Mass.

I claim, 1st, The method of producing a pulverulent acid phosphate of lime, substantially as and for the purposes above set forth.

2d, The product obtained by the process, substantially as and for the purposes above described.

75,272.—MANUFACTURE OF ACID PHOSPHATE TO BE USED IN FOOD.—E. N. Horsford, Cambridge, Mass.

I claim the manufacture of liquid acid phosphate of lime, for use as a condiment or article of diet, or ingredient to be employed in beverages or food, substantially as and for the purposes herein set forth.

75,273.—GRINDING MILL.—G. W. Hubbard and S. A. Smith, (assignors to Cresson & Smith), Philadelphia, Pa.

We claim, 1st, The lever, B, combined with and trued by the disk, a, substantially as described.

2d, The shell, D, with its inclined edge adapted to the plate, E, substantially as set forth.

3d, The spindle, A, with its burr, when confined in its place within the shell by adjustable collars arranged upon the spindle, as specified.

75,274.—BABY CREEPER OR WALKER.—P. H. Hurd (assignor to Clara Hurd and E. D. Horton), Croton, Mich.

I claim, 1st, Frame, A, chair, B, and rollers, C, in combination, substantially as described.

2d, Revolving chair, B, with flexible seat, D, and strap, E, in combination with frame, A, substantially as and for the purpose described.

75,275.—CLOSING FRUIT JARS.—William M. Imlay, Philadelphia, Pa.

I claim, 1st, Making and adapting the neck of a fruit-jar so as to be used for a spiral wire coil, substantially as and for the purposes set forth.

2d, A wire coil, arranged and used about or around the neck of a fruit jar, so as to make a fastening for fruit jars, substantially as set forth.

3d, The arrangement and construction of a wire coil about the neck of a fruit jar, so as to make an elastic pressure on the cover, as described.

The broad-seated ring or gasket, H, when retained in place by the beveled or inclined top, I, substantially as and for the purposes specified.

75,276.—GATE.—J. L. Janewa, Flemington, N. J.

I claim the continued arrangement of ar, ornamental or garden gate, B, with the stationary posts, A, A, and rollers, C, C, and cast bar, C, for the purposes set forth.

75,277.—GRAIN DRIER.—J. B. Johnson, Indianapolis, Ind., assignor to himself, T. E. Johnson, and B. F. Johnson.

I claim, 1st, Making the top of the furnace of drying kilns of cobblestones

wheel, C, when arranged with connecting arms and joints, substantially as specified and for the purposes described.

75,342.—FLUID METER.—Leicester Allen, New York city, assignor to himself and Solomon F. Smith, Waterford, N. Y.

I claim, 1st, the combination of the opening, b and i, with valves fixed to a pivoted arm, v', in such a manner that by the movement of the arm the openings shall always be proportionately uncovered or closed, when this combination is used in a fluid meter, substantially as and for the purposes specified.

2d, The cylinder, C, provided with the piston, D, and the opening, c, or their equivalent, when used in a fluid meter, substantially as and for the purposes specified.

3d, The chamber, J, provided with the diaphragm, m, substantially as and for the purpose specified.

4th, The arrangement, in a fluid meter, of the chambers, B B', cylinder, C, piston and rod, D D', arm v', and valves v v', substantially in the manner and for the purposes set forth.

75,343.—MAP AND CHART HOLDER.—E. A. Apgar and A. C. Apgar, Trenton, N. J.

We claim the self-adjusting rotary compound hinge, as described, and for the purposes set forth.

75,344.—HYDRANT.—T. R. Bailey, Jr., Lockport, N. Y.

I claim, 1st, A hydrant or water-plug, constructed substantially as shown and described, that is to say, with the parts A and B connected together as shown, and with a cylinder valve and a waste water valve connected and operated in combination, substantially as herein specified.

2d, The arrangement of the parts, A, B, valve, D, case, C, and stuffing box, H, as herein described for the purpose specified.

75,345.—RAILROAD CAR HEATER.—Wm. C. Baker, New York city.

I claim, 1st, A circulating hot-water apparatus, adapted to railroad cars and other vehicles, in which a rising water pipe from the heater opens into a water vessel, in combination with a descending pipe and radiating or heating tubes, substantially as and for the purposes set forth.

2d, The heating tubes, arranged as shown, to run from the side of the car beneath the respective seats, and furnish warmth to the individual passengers, in combination with the aforesaid hot water heating apparatus set forth.

75,346.—FIREPROOF SAFE.—R. A. Ballou, Boston, Mass.

I claim embedding in the filling of a fireproof safe a stratum or strata of wood, arranged substantially as described, for the purpose of enhancing the non-conduction power of the safe walls, as specified.

75,347.—SASH-STOP FOR WINDOWS AND DOORS.—Frederick Baumgartner, Brooklyn, N. Y.

I claim the combination with the sash and frame of a sliding window or door of a combined spring, A, and roller, B, arranged and operating substantially as and for the purposes herein specified.

75,348.—SELF-PROPELLING ENGINE.—N. S. Bean, Manchester, N. H.

I claim in steam fire engine, in which the steam and pump cylinders are arranged as described, operating the wheels of the engine to propel it over the road, substantially as specified.

Also, the arrangement on the shaft driven by the steam cylinders which work the main pumps of steam fire engines of the driving wheel, d, or its equivalent, so that it can be made fast or loose on said shaft, substantially as and for the purposes specified.

Also, the combination of the axle of the steering wheel with the hand wheel, o, by means of the chains, s, windlass barrels, l, shaft, j, worm gear k, worm, m, shaft, n, substantially as and for the purpose specified.

75,349.—MOTH-PROOF BEEHIVE PORTAL.—Enoch Beard, Salem, Iowa.

I claim, 1st, The platform, H, with its crevices, D D D and E E, and flap, F, and crevice, G, when constructed and used as set forth.

2d, The back, I, when combined with the box, J, and constructed, and used as shown.

3d, The box, J, separated into stories by the floor, U, when constructed and used as set forth.

4th, The tubes, T, when constructed and used as herein shown.

5th, The drawer, C, when combined with the partition, N, and constructed and used as shown.

6th, The slide, M, in combination with the movable ledge, L, when constructed and used as set forth.

7th, The partition, N, attached to the under surface of the platform, H, when constructed and used as set forth.

75,350.—MACHINE FOR THREADING SCREWS.—Jason A. Bidwell, East Boston, Mass.

I claim, 1st, The construction of the threading clamps or dies, E E, with cutters and recesses, in such manner as to form counterparts of the screws which they are designed to produce, substantially as described.

2d, The application of threading clamps, E E, to laterally vibrating jaws or carriers, E I, in combination with a device for holding screw blanks while they are being threaded, substantially as described.

3d, The laterally vibrating and rectilinear reciprocating die carriers, E I E I, in combination with the leader screw, c, substantially as described.

4th, The application of elastic yielding half-nuts, d, to vibrating threading die carriers, E I E I, substantially as described.

5th, The combination of closing cams, B B, and opening spring, e, with the threading die carriers, E I, substantially as described.

6th, The combination of the machinery substantially as herein described, for producing threads on screw blanks, of the gripping jaws, g, e, and cams, g I, applied and arranged so as to operate substantially as herein described.

7th, In a machine for producing threads upon screw blanks, the gripping jaws, g, cams, g I, and toggles, h I, combined with a sliding collar, H, and applied to a spindle, all substantially as described.

8th, The arrangement of the devices specified for adjusting the cams, g I, in the screw blank threading machine, herein shown and described, for the purpose set forth.

9th, In a screw thread cutting machine employing an intermittent rotating spindle carrying the blank-holders, the index wheel, u, with its dog, p, applied substantially as described.

10th, In combination with the wheel, O, with its dogs, p, p, the vibrating lever, N, latches, F P I, and lever, L, said parts being applied to a screw cutting machine, so as to operate substantially as and for the purposes described.

11th, The spring arms, M M, the lifting lever, N, right and left latches, P P I, and the vibrating lever frame, L, carrying the shifting gear, L I L, all combined and applied to a screw threading machine, substantially as described.

12th, The pitman rod, L, with its check stand, n, and the slotted guide, n I, in combination with the lever frame, L, substantially as described.

13th, Providing the lever frame, L, with right and left latches, P P I, for arresting this frame at the terminal of its strokes, said parts being applied to a screw threading machine, and operating substantially as described.

14th, The driving of the leader screw shaft, F, and the gripping jaw, carrying spindle, G, by means of a single wheel, J, which receives intermittent rotary or oscillating motions from shifting wheels, L I L, substantially as described.

15th, The adjustable yoke, B I, applied upon the cam rods, B B, for the purpose of regulating the amount of lateral vibration of jaws, E I, carrying threading dies or cutters, E, substantially as described.

75,351.—LAMP CHIMNEY CLEANER.—James S. Black, Oakland, Ill.

I claim the disk, D, in combination with the springs, B, and sliding central rod, C, all arranged as described, whereby the springs are prevented from bending inward as they are extended, as herein shown and described.

75,352.—MACHINE FOR CUTTING HOOPS FROM THE EDGE OF A BOARD.—S. C. Blinn, J. J. Alvord and H. Brewer, Tecumseh, Mich., assignor to S. C. Blinn.

We claim the combination of the knife, K, arms, M and N, and guides, N and N', with the crank, B, pitman, K', and rods, L, when the parts are constructed and arranged to operate so as to permit the knife to travel with a reciprocating and curved transverse movement, substantially as set forth.

75,353.—KNITTING MACHINE.—Henry Bogel, Watertown, Wis.

I claim, 1st, The arrangement of the grooves, p, q, r and S, in the lower surface of the plate, D, in connection with the movable plate, t, whereby the groove, S, may be closed, and the grooves, p and r, connected directly with each other, all as set forth.

2d, The plate, M, sliding on the plate, D, and operating the plates, t, and arms, g' and h', substantially as and for the purposes herein shown and described.

3d, The device for taking up the slack of the thread, consisting of the bars, c' (or d'), in combination with springs, e', and arms, g' (or h'), the latter being operated by the plate, M, all made and operating substantially as herein shown and described.

4th, The elastic extension, b', of the spools, I, and the bars, c' (or d'), for taking up the slack of the thread, substantially as described.

5th, The slotted latch opener, N, in combination with the thread holder, I, and supports, K, K, of the spool, all made and operating substantially as herein shown and described.

75,354.—LANTERN.—Wm. H. Bonnell, Buffalo, N. Y.

I claim the combination, and arrangement of the springs, I I, with the rims, A or B, and openings, C C, as and for the purposes described.

75,355.—WELL BORER.—Geo. W. Bowen, Fort Wayne, Ind.

I claim, The circular plate, D, for well cleaning, when provided with holes, a, for the purpose of allowing the escape of water from the dirt or sand, being lifted from the well, as herein set forth for the purpose specified.

2d, The plate, D, having spring cutting edges, all formed in one piece and provided with holes, a, as and for the purpose specified.

3d, The application of the ropes to the plate, D, for the purpose of elevating the tool from the well, as and for the purpose specified.

4th, The tool for cleaning wells, constructed as described, consisting of the perforated disk, D, having spring cutting edges, surrounded by the rim, F, and provided with adjustable bands, A, B, as herein shown and described.

75,356.—GATE.—John Bowser, Clinton, Wis., assignor to Elijah W. Blaisdell, Jr., Rockport, Ill.

I claim, 1st, The extension of the main levers, F, F, and the application to the lower end of the same of the balance weight, A.

2d, The double pulley block, with dead-eyes to keep the cord on the pulleys, suspended on a single rod, or working with journals in the head of the gate, and operating with a swinging or lateral motion on the opening and shutting of the same, as shown by diagram.

75,357.—CAR TRUCK.—Alfred Bridges, Newton, Mass.

I claim the combination of the journal boxes and housings with the links for supporting the car body, and the cross-heads upon which said links are held, in the manner described, so that the said boxes, while having a free, lateral motion, shall be prevented from twisting in their housings, as herein shown and set forth.

75,358.—TRUNK.—James H. Burnett, Jr., Newark, N. J.

I claim in combination with a trunk constructed as described, the lid, X, X, made in two sections, hinged together, one section being also hinged to the front edge of the trunk at Y, and the other adapted to fit against the vertical part of the trunk, both forming an obtuse angle, the removable partition, A, in the body of the trunk, and the hat receptacle, as herein shown and described.

75,359.—HAT BUCKLE.—J. N. Burton, Senoia, Ga.

I claim as a new article of manufacture a ticket-holding attachment for

hats, consisting of the buckle, A, carrying the spring, C, all made and operating substantially as herein shown and described.

75,360.—COMBINED KNOB LATCH AND DOOR LATCH.—Henry W. Busege, Chicago, Ill.

I claim the combination in a door lock of the latch, B, provided with a notch, b, the bolt, c, provided with a slot, c, and notches, e, f, the bent arm, D, the bar, F F', provided with a tongue, t, the spring, a, a', and the plate, G, all arranged and operating substantially as and for the purposes specified.

75,361.—UNIVERSAL JOINT.—J. J. Butts and A. S. Stone, Plainville, Minn.

We claim the ball, B, and arms, A A, constructed and connected substantially in the manner and for the purpose specified.

75,362.—PIANO FORTE.—L. Caldera and L. Montu, Turin, Italy.

We claim, 1st, The method of prolonging the vibrations of the strings of a piano, substantially in the manner and by the means herein shown and described.

2d, The combination, with the ordinary striking hammer, damper, and other parts of the action of a piano, of an auxiliary or vibrating hammer and clock work, or equivalent mechanism for imparting the desired motion to the same, substantially in the manner and for the purposes herein shown and described.

75,363.—LAMP BURNER.—Geo. J. Capewell, West Cheshire, Conn.

I claim, in a lamp burner, such as herein described, the rim, B, and standard, E, provided with the springs, c and d, when the latter are constructed and arranged in the manner as herein shown and specified, and for the purpose set forth.

75,364.—ANGULAR SHAFT COUPLING.—John M. Case, Athens, Ohio.

I claim the combination of the oblong frames, C, having cogs or teeth, c', formed upon the ends of their forward sides, and the pivoted connecting bars, D, with each other, and with the ends of the connected or coupled shafts, substantially as herein shown and described, and for the purpose set forth.

75,365.—INSULATOR.—Alfred H. Castle, Ann Arbor, Mich.

I claim, 1st, A telegraph insulator or bracket, constructed with a groove, E, substantially as and for the purpose set forth.

2d, The cavity or chamber, B, and groove, E, in combination with the bracket, A, substantially as set forth.

75,366.—ELEVATOR.—Simeon B. Castle, Cortland, N. Y.

I claim, 1st, The slotted frame, A, in combination with the cross-head elevators, B, for the uses and purposes set forth.

2d, The adjustable table, b, in combination with the elevator heads, for the purpose described.

3d, The quadrant-shaped bars, c', c', in combination with the frame, A, and axle of the driving wheels, for the purpose of raising and lowering the main apparatus.

75,367.—BUNG.—N. L. Chappell, New York city, and C. H. Pettit, Jersey City, N. J.

We claim, 1st, The sliding dogs, C, formed with inclined planes or faces, e', and operated by the cone-like grooves, c, which forms a hook which works on portions, A, B, substantially as and for the purpose herein set forth.

2d, The spurs, or projections, f, formed upon the lower part, B, of the bung, substantially as and for the purpose specified.

75,368.—HAND CORN SHELLER.—Charles Christian, Milwaukee, Wis.

I claim, in combination with the hand corn sheller, A A, the curved guard-plates, D, D, substantially as and for the purpose set forth.

Also, in combination with the hand corn-sheller, A A, the set screw, E, substantially as and for the purpose set forth.

Also, the combination of the plates, A, A, as described, and provided with the guard plates, D, D, springs, i, i, and set screw, E, substantially as and for the purpose set forth.

75,369.—CLAMP FOR SCRUB BRUSH.—Charles B. Clark, Buffalo, N. Y.

I claim constructing the sliding collar, c, with the flange, s, when arranged on the inclined shank, d, and operated by a nut, E, in the manner and for the purpose shown and described.

75,370.—RAILWAY CHAIR AND FASTENING.—Dominicus N. Clark, Eastport, Me.

I claim, 1st, The chairs, C, clamps, E, ties, F, and sleepers, B, when said parts are constructed and combined with each other, substantially as herein shown and described, and for the purpose set forth.

2d, The combination of the iron ties, F, having an enlargement or shoulder, f, upon each end, with the chairs, C, substantially as herein shown and described, and for the purpose set forth.

3d, The combination of the intermediate ties, F, constructed with stationary jaws, f, and shoulders, i, formed upon them, and removable jaws, i, with the rails, A, and sleepers, B, substantially as herein shown and described, and for the purpose set forth.

75,371.—HEAD BLOCK.—Thaddeus L. Clark, Mt. Vernon, O.

I claim, 1st, The indicating wheels, K K, provided with grooves, x, x, and different series of figures on their peripheries in combination with the indicators, i, i, as and for the purpose set forth.

2d, The combination of the shafts, C, C, indicating wheels, K K, and ratchet wheels, D D, with the housings, H H, quadrants, I I, and levers, E, when constructed and operated substantially as described and used for the purpose set forth.

75,372.—LOCK FOR FRUIT BOXES, ETC.—Charles Colby, Madison, Wis.

I claim, 1st, Fastening and holding the band or cord of the box by means of a single top, m, with double grooves, b, c, which double groove, b, which keeps the top in mortise or slot, and the double groove, d, e, f, which, when bent, forms a groove to receive and hold the end, e, of band or strip, substantially as set forth and described.

2d, In combination with the subject matter of the above, the double bearings or rests, n, n, for the bottom of the box, substantially as set forth.

75,373.—COTTAGE CHAIR.—Claudius O. Collignon (assignor to himself and Nicholas Collignon), Closter, N. J.

I claim the combination of the back, A, seat, B, and brace, F, with the grooves, h, and bar, G, and their several connections, as and for the purpose set forth.

75,374.—WATER CLOSET VALVE.—William S. Cooper, Philadelphia, Pa.

I claim, 1st, The valve, D, constructed as described, and provided with the cup leathers, e and e', substantially as specified.

2d, The fixed hollow central stem, m, of the cap, C, with the water passages, k, in combination with the valve, D, and chamber, B, substantially as set forth.

3d, The combination of the regulating screw, H, fixed central stem, m, of the cap, C, passages, k, and chamber, B, substantially as described and for the purpose specified.

75,375.—WATER CLOSET.—Wm. S. Cooper, Philadelphia, Pa.

I claim, 1st, A water closet top plate, provided with lug, R, so constructed that, when the valve, D, is raised higher than the top plate, as and for the purpose specified.

2d, A water closet articulated lifting rod, R', combined with lever, L, piece, C, D, and thumbscrew, T' S', constructed and operated in the manner and for the purpose above set forth and described.

75,376.—VALVE COCK.—Wm. S. Cooper, Philadelphia, Pa.

I claim the combination of the valve, n, spindle, H, with its screw, S, the cap, C, with its chamber, M, and waste passage, t', substantially as specified, and for the purpose described.

75,377.—REFRIGERATOR COFFIN.—J. S. Cox, Delaware, O.

We claim the double walled refrigerator coffin, constructed as described, with the ice chambers, a, c, at the head and foot of the corpse chamber, b, said ice chambers having exterior openings, f, for the escape of water, and communicating with the corpse chamber, containing the rack, by means of openings in the bottom of the inner walls of said chambers, as herein described, for the purpose specified.

75,378.—CREASER FOR CLOTH.—W. J. Crane, Carbondale, Pa.

I claim the creasers, C, a, a', and D, constructed as described, combined with the clamp, A, and set screw, b, as and for the purpose set forth.

75,379.—DESK AND SEAT.—Robert Cruikshank, Lawrenceville, N. J.

I claim, 1st, Connecting the lower end of a curved arm, D, with the end frames, E, by means of sliding blocks, E, and horizontal guide rods, F, substantially as herein shown and described.

2d, The combination of the rubber block, G, or equivalent spring, with the guide rod, F, and with the sliding block, E, said spring or rubber block being placed in such a position that the said sliding block will strike against it, both when the seat, C, is in a horizontal position, and when in a vertical position.

3d, The supporting end pieces, A, when cast with dovetailed upper ends, adapted to fit into corresponding grooves formed in the under side of the top, B, of the desk, as herein shown and described, for the purpose specified.

75,380.—CORN PLANTER.—Wm. Daggett, 4th. Cordova, Ill.

I claim, 1st, The gage, a, for regulating the size of the cavity, a, in the plunger, B, of a corn planter, substantially as described.

2d, The corn planter constructed as described, and consisting of the box, A, having partitions, D, d, spring plate, a, scraper, d', plunger, E, having cavity, a, gage, a, and pin, a I, all constructed, arranged, and operating as set forth.

75,381.—UMBRELLA RUNNER.—Anthony G. Davis, Watertown, Conn.

I claim the cylinder, A, and flanged cap, a, in combination with the head, b', the latter being constructed of the slotted strip, B shaped as described, and arranged in such manner that the slots lie contiguous to each other, or parallel with each other, as and for the purposes set forth.

75,382.—CRIBBING PREVENTER.—Benjamin J. Davis, and Isaac S. Cramer, Sergeantsville, N. J.

We claim the parts, C, and B, the one sliding within the other, in combination with the prickling point, a, and spring, all substantially as shown and described, for the purpose of preventing horses from indulging in the so-called habit of cribbing, all as set forth.

75,383.—HARVESTER.—John S. Davis, Tiffin, Ohio.

I claim, Attaching the adjustable bar, G', to a harvester in such a manner that the finger bar, H, and connecting rod, b, may be held in the same line, or parallel with each other, as and for the purposes set forth.

2d, The adjustable arm, G, in combination with the frame, C, and shoe, E, as and for the purpose specified.

3d, The block, x, in combination with the adjustable arm, G, shoe, E, and frame, C, substantially as and for the purpose set forth.

4th, The arrangement of the seat, K, with the bar, M, so that middle of said seat is in a line with the middle of the axle, A, substantially as and for the purpose set forth.

5th, The draw rods, L L, in combination with the cross bar, N, draft pole, T, and arm, M, as arranged and for the purpose specified.

6th, The arrangement of the frame, C, beneath the axle, A, with the draw rods, L L, tongue, T, and bar, M, so that the rear end of the said frame, C, may be raised or elevated without elevating or throwing up the driver in the seat, substantially as specified and for the purpose set forth.

75,384.—WINDMILL.—William C. Day, Mohawk, N. Y., and Pardon B. Day, Shelby, Minn.

We claim, 1st, The arrangement of chain or rope, C, windlass, B, and pulleys, e, f, with the doors, A, surrounding the wind wheel, E, substantially as shown and described.

2d, The combination of chain or rope, C, doors, A, and springs, D, substantially in the manner as and for the purpose set forth.

75,385.—HOP-PICKING TOOL.—John Dean, Baraboo, Wis.

I claim, 1st, A hop-picking instrument, consisting of a rake, having curved teeth, C, and cutters, D D, at the ends, substantially as herein shown and described.

2d, The diamond-shaped teeth, C, with concave front edges, substantially as and for the purpose herein shown and described.

75,386.—GRAIN DRYER.—Julius De Bary, Offenbach, Germany, assignor to William Einstein, New York city.

I claim, in a malt and grain-drying machine, the outer wooden case, A, inner metallic case, a, with an interposed air space, the adjustable endless main scrapers, E, perforated plates, G, F, imperforate plate, H, pipes, I, X, and zigzag hot air flue, D, when constructed, arranged, and operating as described, for the purpose specified.

75,387.—VALVE GEAR FOR STEAM ENGINE.—Edward N. Dickerson, New York city.

I claim, 1st, A reversing link, vibrated by one eccentric, capable of being moved in the direction of its length for reversing, suspended at its neutral point by a radius bar, or other equivalent device, upon which it vibrates, and upon the opposite side of which it works the valve for the forward and backward motion of the engine, substantially as described, in combination with an independent cut off apparatus of any sort, for closing the ports which it opens.

2d, An independent cut off apparatus, adjustable while the engine is in motion, by altering the angular position of the eccentric which works the independent cut off slide, in reference to the line of the crank, substantially as described.

3d, The combination of a pin or block fixed in the main shaft, with a pipe surrounding the main shaft, to which the cut off eccentrics are fixed, and with an exterior sliding sleeve surrounding the said pipe, provided with two grooves, one of which receives the end of the fixed pin, and the other of which receives a block or pin fixed upon the eccentric pipe, and one or both of which grooves are spiral, as a device for the purpose of varying the angular position of the cut off eccentrics upon the main shaft, substantially as described.

4th, A graduated opening, through the main port, or valve, in combination with the exhaust openings, so arranged as that one exhaust aperture will be opened before the other closes, and with an independent adjustable cut off for the purpose of preventing a "cushion" of the steam and the shock of sudden admission, without "wire drawing" through the graduated opening in cutting off, substantially as described.

75,388.—CARD-SETTING MACHINERY.—Thomas A. Dickinson, Worcester, Mass.

I claim, 1st, The round slide, M, constructed and operating as described.

2d, The combination of the slide, M, slide, i, link, P, and lever, Q, in the manner described.

3d, The mode described of clamping the wire to the slide, M, by means of the jaw, L, and spring, K, operating as specified.

4th, The clamping jaws, c, d, operated by the spring, S, substantially in the manner set forth.

5th, The cutter cylinder, V, constructed and operating as described.

75,389.—DOOR OF FIRE PROOF SAFE.—William B. Dodds (assignor to Dodds, MacNeale & Urban), Cincinnati, O.

I claim the provision, in a fire proof safe, of an auxiliary door, C, hinged to, and when open, affording access to, the entire lock and door bolt movement and filling of the door proper, as set forth.

75,390.—LAMP SHADE.—T. B. Doolittle, Bridgeport, Conn., assignor to himself, George Doolittle, and George H. Dimond.

I claim, 1st, A lamp shade or reflector, formed of sheet metal, adapted to be applied to the chimney of a lamp, and so corrugated or crimped as to be capable of sufficient spring or elasticity to permit it to be sprung on to the chimney, substantially as described.

2d, The employment, in combination with a shade or reflector, of a spiral or coil spring or springs, arranged in the upper edge of the shade, so as to roll over a spring back, substantially as described for the purpose set forth.

3d, Forming a corrugated or crimped metallic shade, with projecting metallic teeth or lips, s, s, substantially as described for the purpose set forth.

75,391.—APPARATUS FOR TANNING IN VACUO, AND FOR OTHER PURPOSES.—Charles Doty, St. Louis, Mo.

I claim the vessels, A and B, when coupled together with the pipe, D, and otherwise provided with the cocks, C, a', and h, and doors, a, b, all arranged and operated substantially as herein shown and described.

75,392.—SAFETY VALVE.—S. B. Dougherty, Bordentown, N. J., assignor to himself and John Ashcroft, New York city.

I claim the arrangement of the cylinder, A, with its perforations, f, f, annular chambers, E A H, and valve seats, I I, substantially as described and set forth.

Also, the construction of the inner cylinder, or double seat valve, K, with its recess, L, shoulder, m, seats, k and k', and internal steam exit opening, n, substantially as set forth and described.

75,393.—MODE OF IMITATING CLUSTER JEWELRY.—William O. Draper, Albert C. Sweetland, and George H. Draper, North Attleboro, Mass.

We claim the method of constructing cluster work jewelry, substantially as herein described.

75,394.—PRINTING PRESS.—A. A. Dunk, Philadelphia, Pa.

I claim, 1st, The combination of the form cylinder, D', the cylinder, C, separated into as many segmental platens as there are forms on the said cylinder, D', and nippers, constructed in the manner described, or any equivalent to the same, but in number one in excess of that of the forms or segmental platens, and arranged to revolve in a circle larger in diameter than, but eccentric with, that of the platen roller, all substantially as and for the purpose herein set forth.

2d, The grooves or channels, b, of the cylinder, G, and intervening segmental platens, in combination with the series of nippers, so many in number in respect to the grooves, and revolving in a course so eccentric with that of the cylinder that each set of nippers will transfer a sheet from one platen to the other, and will find its way from one groove to another, all substantially as and for the purpose herein set forth.

3d, The said revolving nippers, moving in a circle eccentric with the cylinder, G, having segmental platens, in number, one less than that of the nippers, in combination with the devices herein described, or any equivalent to the same, by the aid of which the paper, carried by any one set of nippers, shall be released, but not before it has been carried round as many times as there are platens on the said cylinder.

75,395.—ANVIL CUTTER.—Valmore A. Dunn, West Peru, Me.

I claim the improved shears, composed of the fixed arm, b, and jaw, B, lever, C, C, and spring, D, combined and arranged in manner substantially as above set forth and described.

75,396.—SASH BEAD FASTER.—Daniel W. Dyer, and James H. McVaugh, Philadelphia, Pa.

We claim the catch, E, constructed substantially as herein shown and described, in combination with the plates, F and G, and beads, B and C, either or both, and casing, A, as and for the purpose herein set forth.

75,397.—SEAT FOR VEHICLE.—Walter A. Eddy, East Randolph, N. Y.

I claim the arrangement of the lever, B, with the connecting rods, C, C, plates, D, D, when secured or adjusted to the bottom of a seat, A, for the purpose of securing the same on a buggy, wagon, or cutter top, substantially as and for the purpose herein set forth.

75,398.—BOOT AND SHOE.—Henry Eldridge, Lynn, Mass.

I claim suspending and combining the rolls of material in the manner described, whereby they may be unwound and lapped one upon another, essentially as herein shown and specified.

75,399.—WRENCH.—John J. Ellis, Auburn, N. Y.

I claim the shank, B, extending through the handle, A, and furnished at one end with a screw thread, upon which is screwed hammer, C, the opposite end of shank B being formed with a jaw, all arranged in combination with jaw, D, and slide, E, substantially as and for the purpose set forth.

75,400.—PETROLEUM OR GAS STOVE.—D. L. Emerson, Rockford, Ill.

I claim the oil reservoir, D, and lamp, D, as one vessel, in combination with the tubes, B, B, and burners, E, E', and F, F', constructed as described and operating as and for the purposes set forth.

75,401.—HARVESTER.—E. W. Fairman, Orfordville, Wis.

I claim the hinged or pivoted plate, A, combined with the lever, E, cam wheel, C, and lever, G, arranged and operating substantially as and for the purpose specified.

75,402.—FILING MACHINE.—Moritz Fiedler (assignor to himself and John Klein), Rochester, N. Y.

I claim the combination of the table, a, rotoched segment, d, and worm, c, with the slotted pitman, n, and crank, r, arranged substantially as described.

75,403.—CORN HUSKER.—Charles Ford, Forest city, Ill.

I claim, 1st, A serrated feed hard roller, H, and rubber roller, I, used, as herein set forth, for husking corn, by catching the husk and stalks and passing them through beneath, while the ear is left on top.

2d, The rollers made, as herein set forth, fig. 2, smaller for near one third their length at the front end, to admit the stalks between the rollers.

3d, The use of the gain thread, J, which increases the acuteness of its angle with the roller, as it runs back, see fig. 3, from the point to the swell of the rollers, thereby pulling the cornstalk gently over at first, but then quickly and upward in such manner that the ear corn is pulled with the threads that pull them, thus avoiding the danger of breaking them off before they get in to the hopper.

4th, The use of the right hand gain thread, on the front end of the left hand roller, and the left hand gain thread, see fig. I, J, on the right hand roller, in connection with the inward and downward motion of the rollers.

5th, The hopper, F, made and used as herein set forth.

6th, The snapper, G, made and used for breaking the ears from the stalks and husk, while the latter are held firmly beneath, between the rubber and serrated rollers, and also for carrying the ears back under the presser.

7th, The presser, T, for pressing the ears down and rolling them over as it passes them back between the rubber and serrated rollers, so that any remaining husk or silk may be taken off before they pass out to the dropper.

8th, The dropper, I, arranged as herein described, in connection with the mouth, m, of the machine, in such manner that the ear corn is delivered in a wagon it driven for that purpose, without other assistance.

9th, The breaker, Z, made and used as herein set forth, to break the tops of the stalks back, so they will pass down between the rollers before they get far back on them.

10th, The combination of the gain thread, J, rubber roller, I, serrated roller, H, fenders, S, snapper, G, presser, T, hopper, F, dropper, I, gearing, N, and frame, D, arranged and used as herein described.

75,404.—MANUFACTURE OF VINEGAR.—Andre Foubert, New York city.

I claim an evaporating tub containing platforms and vapor tubes, in combination with the apparatus for supplying water and vinegar, and with the vat containing shavings, substantially as and for the purposes set forth.

75,405.—MACHINE FOR COILING SPRINGS.—John Freeland and Daniel Ward, New York city.
We claim, 1st, The slotted coiling spindle, e, and the sliding screw, E, in combination with the chuck, b, all constructed, arranged, and operating substantially as and for the purpose herein described.
2d, The guide rest, H, and the sliding block, I, in combination with the coiling spindle, e, constructed and operating substantially as and for the purpose herein described.
3d, The combination of the pulleys, C, the chuck, b, the coiling spindle, e, the sliding screw, E, the guide rest, H, and the sliding block, I, constructed, arranged, and operating substantially as and for the purposes set forth and described.

75,406.—FABRIC FOR THE MANUFACTURE OF HATS, CAPS, ETC.—Treflé Garceau and Edward De La Granja, Boston, Mass.
We claim, 1st, The composition above described, substantially as and for the purpose set forth.
2d, The process of manufacturing hats, caps, bonnets, neckties, and ribbons, substantially as specified.

75,407.—JOINT FOR PIPES.—Benjamin Garvin and R. J. Pettibone, Oshkosh, Wis.
We claim the parts, A, A, constructed as specified and used with the bolt, which said bolt passes transversely through both of said parts and is substantially secured, one of its outer sides by nuts and washers, or their equivalent, as set forth.

75,408.—SINGLE TREE.—George Gibbs and William Gibbs, Canton, Ohio.
We claim the tree, a, provided with the short disconnected springs, b, b, loops, c, c, and one or more indicators, e, for marking the numbers on said loops, all combined and used substantially as set forth.

75,409.—WHIP LOCK.—Francis M. Gifford (assignor to himself and John C. Selden), Erie, Pa.
I claim, 1st, A lock for securing a whip in the socket upon the dasher of any vehicle, composed of the arms, A, forming two sets of jaws operated by a screw, D, and key, E, and a spring, a, or its equivalent, substantially as shown and described and for the purposes set forth.
2d, The arms, A, in combination with the vibrating nut, C, and the wire spring, a, and the vibrating socket, B, and the screw, D, substantially as shown and described and for the purposes set forth.

75,410.—COTTON SEED PLANTER.—A. J. Going, M. D., Clinton, La.
I claim, 1st, The fixed metallic strips, g, g, in combination with the laterally-adjustable metallic strips, h, h, placed at the bottom of the hopper, I, and the radial arms, e, attached to the axle, C, and working between the strips, g, g, h, h, all constructed and arranged for joint operation, substantially in the manner as and for the purposes set forth.
2d, The furrow opener, H, and harrow, F, in combination with the cotton seed distributing mechanism, all constructed, arranged and applied for joint operation, substantially as and for the purpose specified.

75,411.—GRINDER FOR KNIFE FOR PLANER.—John Grant, Northampton, Mass.
I claim a device for sharpening the knives of planers and similar tools, consisting of the screw, H, piece, G, wheel, D, and ground spindle, F, the parts and the whole being constructed and arranged substantially as shown.

75,412.—SURGICAL CUP.—John G. Hadfield, Cincinnati, Ohio.
I claim the provision, in a surgical cup, of a groove, a, to receive and hold an india-rubber lip, B, in the manner set forth.

75,413.—MACHINE FOR CARVING IN WOOD.—Isaac Hall, New York city.
I claim, 1st, The combination of one or more pivoted or swinging frames, I, J, constructed substantially as herein shown and described, with the pivoted frame, H, as and for the purpose herein set forth.
2d, The frame, H, adjustable with relation to the pivoting frame, C, for the purpose of carving two exact copies of the pattern at the same time, or increasing or diminishing the size of the copy in exact proportion to the pattern, substantially as herein shown and described.
3d, The tracer, S, adjustably secured to the slotted bar or arm, O, of the swinging or pivoted frame, I, by means of the slotted bar, Y, rods, W, Y, and sockets, Z, Z, substantially as herein shown and described, and for the purpose set forth.
4th, The combination of the slotted bar, V, pivoted rod, W, and adjustable pivoting rod, Y, with each other and with the tracer, S, and slotted bar or arm, O, of the pivoted frame, I, substantially as herein shown and described and for the purpose set forth.
5th, The combination and arrangement of the pulleys, L and N, with the pivoted frame or frames, I, and J, frame, H, and driving pulleys, D, E, for the purpose of keeping the band or bands, F, taut while operating the cutters, whatever may be the relative positions of the said frames, substantially as herein shown and described.
6th, The arrangement of the holder and frame, P, with relation to the pivoted frame, I, tracer, S, and cutter in the arm, I, substantially as described and for the purpose specified.

75,414.—MODE OF ATTACHING COLTERS TO PLOW BEAMS.—James H. Hall, Maysville, Ky.
I claim the said wrought-iron sliding plate, with its flanges, mortises, and adaptation to the purpose of regulating the position of and holding fast the colter to a plow beam.

75,415.—FURNACE FOR SMELTING ORES OF LEAD AND OTHER METALS.—R. Henry Hall, Taunton, Mass.
I claim the application of a receiving basin, as herein described, to furnaces used for smelting ores of gold, silver, or lead.

75,416.—HAY RAKER AND LOADER.—John Harper, Hillsboro, Iowa.
I claim, 1st, The revolving rake head, G, attached to arms, E, E, and used in combination with the elevating cords, I, and spool, C, and the ratchet, F, and pawl, H, said parts being arranged to operate substantially in the manner and for the purpose set forth.
2d, In combination with the frame, A, and elevating arms, E, the pieces, D, pivoted to the frame, a, held extended by the pins, D', so as to permit the width of the frame to be diminished when necessary, substantially in the manner set forth.

75,417.—GRAIN SEPARATOR.—Samuel Harris, Springfield, Mass.
I claim, 1st, The combination of the slotted rod, E, having rollers, c, with the triangular surface cam, D, when used and arranged upon a sifter, substantially as herein described.
2d, In combination with the above, the double-inclined agitators, e, e, etc., arranged as described.

75,418.—LAMP SHADE.—Henry M. Hartshorn, Malden, Mass., assignor to himself and Daniel Forbes, Boston, Mass.
I claim as my invention the folding shade made of trapezoids, connected at their edges by strips of cloth, or the equivalent thereof, so that the several sections may be either folded or unfolded, as specified.
Also, the combination, as well as the arrangement, of the series of sectional supporters, c, and a folding shade composed of a series of trapezoids, a, arranged and connected or hinged together at their edges, substantially in manner as specified.

75,419.—SUBSOIL ATTACHMENT FOR PLOWS.—Charles Hayden, Collinsville, Conn.
I claim, 1st, The share standard, F, fitted in the plates, E, G, and retained at the desired height by the pin, d, in one of a series of holes, c, substantially as and for the purpose specified.
2d, The combination of the lever, I, and pins, e, with the share standard, F, all constructed, arranged and applied substantially in the manner as and for the purpose set forth.

75,420.—CAR COUPLING.—G. W. Haynie, Olney, Ill.
I claim, 1st, The combination of the segmental cam pinion, B, b, and coupling pin, E, e, when the same are adapted to be operated by the coupling link, substantially as shown and described.
2d, The spring, F, applied and operating substantially as and for the purpose specified.

75,421.—SCRUB BRUSH.—Daniel E. Hayward, Malden, Mass.
I claim, as an article of manufacture, the brush as described, viz., when composed of alternate rows of rubber and bristles.

75,422.—CLOTHES PIN.—D. K. Hickok, Morrisville, Vt.
I claim the blocks, A and B, constructed substantially as described, and connected together by means of the bands or elastic straps, C, C, as and for the purpose set forth.

75,423.—TRAMMEL FOR STAIR RAIL.—George Hoover, Richmond, Ind.
I claim, 1st, The herein-described trammel, composed of the cylinder, F, and arm, E, in combination with rod, I, substantially as described, and for the purpose set forth.
2d, The horizontal rod, I, vertical adjustable rods, G and H, in combination with the collars, K and L, clutches, J, and J', and draft board, A, substantially as set forth and for the purpose specified.

75,424.—STEAM WATER ELEVATOR.—William L. Horne, Baltimore, Ill.
I claim the combination of the siphon, n, with the steam water elevator, constructed and operated substantially as herein set forth.

75,425.—CLOTHES WRINGER.—Robert B. Hugunin, Cleveland, Ohio.
I claim the arrangement of the right and left helical gear wheels, B and B', in combination with the elastic rollers, A and A', end pieces, C and C', journal blocks, E and E', spring bars, F and F', stop, H, and adjusting screw, J, substantially as and for the purposes specified.

75,426.—STOPPING AND STARTING CARS.—C. S. Hunt, Parish of Terre Bonne, La.
I claim, 1st, The loose pulleys, F, F', on axle, C, in combination with chains, E and E', and spring, D, arranged and operating substantially as and for the purpose set forth.
2d, The loose pulleys, F, F', chains, E, E', and spring, D, in combination with clutches, G, G., and their actuating levers, arranged for joint operation substantially as described.

75,427.—LIFTER AND TONGS.—John Hyslop, Jr., and Charles E. Phillips, Abington, Mass.
We claim the lifter and tongs, constructed as described, consisting of the parts, A, B, pivoted together, the part, B, provided with a longitudinal slit for the passage of the part, A, and having at its forward end the double lips, d, d and e, e, the part, A, having the lip, b, and the lip, c, provided with the shoulder, dx, all arranged and operating as described for the purposes specified.

75,428.—MACHINE FOR SHAPING THE SOLE OF A SHOE.—Jos. B. Johnson, Lynn, Mass.
I claim the combination of the rotary bar, u, or the same and the auxiliary last, v, with the main press, w, and the mold, A, and the press.
Also, the application of each last, v, to the rotary bar, u, so as to be capable of being revolved on a axis passing through or extending from the last.
Also, the application of the mold, A, to the arch bar of the press, by means substantially as described, or the equivalent thereof, whereby such mold is enabled to exert pressure of the sole against it, to adjust itself to the sole.
Also, the combination and arrangement of the facing plate, z, with the last and its elastic cushion, y, applied thereto as represented.

Also the combination of the slide bar, k, the wedge, m', and the auxiliary treadle lever, o, with the toggles and their operative pitman and treadle lever.
Also each last as made with the extra or lower foot, arranged with the main foot, and being for the purposes as set forth.

75,429.—GAS HEATER.—Daniel Kellogg, Jackson, Mich.
I claim, 1st, The employment of a revolving disk, substantially as shown and described, for the purpose of spreading the flame of a gas or oil stove, and
2d, The adjustable dish, H, in combination with the burner, b, and disk, K, substantially as and for the purpose shown and described.
3d, The oil, e, and elevating screws, m, m, for adjusting the height of the disk above the burner, substantially as shown and described.
4th, Providing the rod, e, with a screw thread or other equivalent device, for the ready adjustment of the disk, substantially as and for the purpose shown and described.

75,430.—HORSE HAY FORK.—George Kinney, Bristol, Ind.
I claim the combination of the stem or central prong, A, cross bar, B, side prongs, C, arm, D, pivoted hooks or fingers, E, shield, F, and trip lever, G, with each other, said parts being constructed and arranged substantially as herein shown and described and for the purpose set forth.

75,431.—ARTIFICIAL TEETH.—A. A. Knowlton, St. Albans, Vt.
I claim artificial teeth provided with holes, formed with a screw thread, when secured to a vulcanite or rubber base, b, by means of screws, d, of the same material, all constructed and arranged substantially as and for the purpose set forth.

75,432.—HYGROMETER.—A. E. Lazell, West Meriden, Conn.
I claim the carvilinear strip of wood, constructed as described, and having one of its surfaces provided with an impervious coating, in combination with an index, s, substantially as and for the purpose specified.

75,433.—FAGGOT FOR RAILROAD RAIL.—William Leighton, Wyandotte, Mich.
I claim the Y or dovetail shaped piece of steel, with V-shaped top, in conjunction with any suitable faggot which will make a rail, as shown in fig. 2.

75,434.—CATAMENIAL SACK.—H. W. Libbey, Cleveland, Ohio.
I claim the sack, A, having the elastic pieces, a, a, in each side to give it shape, and the elastic band, B, in combination with the adjustable belt, D, all constructed in the manner described, as and for the purpose set forth.

75,435.—CORN PLANTER.—Noyes Liddell and Morris Liddell, Lafayette, N. Y.
I claim, 1st, The combination and arrangement of the tube, C, lever, E, pin, D, and bell, H, for the purpose described.
2d, The slide, J, as described.
3d, The method of adjusting the feed wheels on the shaft, O.
4th, The method of throwing the shaft, O, in and out of gear.

75,436.—CULTIVATOR TOOTH.—M. F. Lowth and T. J. Howe, Owatonna, Minn.
We claim the combination of the beam, A, having the mortises, m, n, as described, with the link, c, wedge, w, and hinged tooth, T, having the brace, B, substantially as and for the purposes set forth.

75,437.—STRAW CUTTER.—C. A. Lundy, Marshalltown, Iowa.
I claim the box, A, provided with the V-shaped knife, in combination with spring, N, feeder, L, gate, H, spring gage, m, all arranged in the manner herein set forth and described.

75,438.—ANIMAL TRAP.—M. B. Marshall, Draw Bridge, Md.
I claim, 1st, In an animal trap, a table, A, having two slots, a, a, and a central aperture, B, and provided with legs, c, c, c, and standards, D, D', substantially as and for the purpose specified.
2d, The combination of the spring pole, O, cords, C, e, a bar, N, rods, R and T, and a rod, G, substantially as and for the purpose set forth.
3d, The notched and graduated bar, N, when used in a trap of this description, substantially as and for the purpose set forth.

75,439.—LAMP BURNER.—George A. Mason, Chelsea, Mass.
I claim, 1st, The arrangement of a chimney sustaining spring, intermediately between the deflector or cone, C, and the base, A, of the lamp top, substantially as and for the purpose set forth.
2d, The guide piece, G, and socket, D, in combination with the base plate, A, and wick tube, B, when said guide piece and socket are constructed as and for the purpose herein specified.

75,440.—TREBLE-TREE.—W. W. Mathews, Yates City, Ill.
I claim, 1st, The staple attachment, D, E, of the inner ends of drawing bars, a, a, and
2d, The curved hook, b, shown in fig. 2, each and all substantially as shown, and in combination as and for the uses and purposes herein expressed.

75,441.—MODE OF PRODUCING MOTION FOR SAWING MACHINES.—James W. Maxey, Plymouth, Ind.
I claim the hand levers, F, F, operating alternately, and connected to wheels, D and R, by pitmen, E, E, and combined with shaft, B, wheel, G, shaft C, drums, H, and balance wheels, I, I, when constructed to operate substantially as described.

75,442.—MODE OF PRODUCING HOT BLAST IN FURNACES.—Theodore McDowell, Light Street, Pa., assignor to T. McDowell and A. McDowell.
I claim the engine, c', pump, c, pipes, I, vessels, F, and chamber, H, when combined substantially as and for the purpose explained.

75,443.—TUMBLER WASHER.—J. P. Milburn, Washington, D. C.
I claim, 1st, The combination with the central pipe over which the tumbler is placed, of an annular pipe or a series of pipes for discharging water upon the exterior of the tumbler, and a valve mechanism operated by the weight of the tumbler, so as to admit water to both the central and the exterior pipe or pipes, substantially as and for the purposes herein shown and set forth.
2d, The arrangement of the nozzles or orifices through which water is discharged upon the exterior of the tumbler in the manner described, so that the jets of water shall be directed tangentially to the tumbler, substantially as and for the purposes herein shown and set forth.
3d, The combination with the central pipe of the annular or exterior pipe and adjusting screws or equivalent mechanism for regulating the pressure of water in the said pipe, substantially as and for the purposes herein shown and set forth.

75,444.—HARVESTER.—Charles G. Miller, Springfield, Ohio.
I claim, 1st, Stopping the rake automatically at the rear of the platform during each alternate revolution of the driving wheel, by means of the herein described mechanism, or the equivalent thereof, for the purpose set forth.
2d, The combination of the shaft, eccentric, n, and pinions, p, p, and A, with the hubs of the driving wheel and rake's crank, substantially as described, for the purpose of throwing the rake in or out of gear automatically, as described.
3d, The combination and arrangement of the foot lever, g', collar, g', clutch pin, h', running through the arm of the driving wheel into the driving pinion, for the purpose of throwing the rake out of gear at the will of the attendant.
4th, The combination of the catch, b', on the end of the hub of the driving wheel, C, the collar, j', provided with the catches, c' and d', and the catch, a', on the hub of the rake crank, substantially as and for the purpose set forth.
5th, The shoe, P, constructed as described, so that it may be adjusted and fixed in its position, in the manner set forth.
6th, The reel post, Q, mounted upon the inner shoe, and curved forward, so that the attendant may grasp its upper end as a lever to raise the outer end of the cutting apparatus from the ground, as set forth.
7th, The sliding carriage, t, connected with the rake head by the arm, u, and link, v, arranged substantially as set forth, so as to push the rake backward with the teeth vertical, and draw said rake forward again with the teeth horizontal.
8th, The reel sliding head, v', constructed with the loose nut bar, p', as and for the purpose set forth.
9th, The spring latch, s', constructed as described and for the purpose set forth.
10th, The construction or arrangement of the cutting apparatus, shoe, P, automatic reciprocating rake, reel, P', and their operating mechanism, in relation to the main frame, so that the cutting apparatus, with its rake and reel, may be folded and so maintained while being moved from place to place, substantially as shown and described.
11th, The guide rods, q' and b', for the outer end of the rake, constructed and arranged as set forth and described, combined with the outer or guide tooth, u' of the rake.
12th, The hook and flange, v', to retain the rake upon its side while being drawn forward, as set forth and described.

75,445.—BEDSTEAD FASTENING.—J. E. Milliken, Bridgeton, Me.
I claim the hinge, C, constructed as described, its leaves pivoted together at their upper ends, F, one leaf extending across the edge of the rail, B, and beneath it, and fitting at its angle upon the shoulder, a, of the vertical leaf secured to the post, A, all arranged as described, whereby the post, A, is adapted to swing up or down upon the pivot, F, as and for the purpose specified.

75,446.—WINDOW SHADE FIXTURE.—Jacob B. Moore, New York city.
I claim, 1st, Rolling or unrolling the curtain automatically, by means of the cord, and the small axes of the roller, substantially as described.
2d, Creating an equilibrium between the roller of the window shade and the lower rod, F, through the medium of the suspended cord and small axes D, whereby the shade is rolled or unrolled, substantially as herein shown and described.
3d, In combination with the shade suspended upon axes, D, and the lower rod, F, the weight, H, whereby the said shade is held at any desired point, substantially as described, for the purpose specified.

75,447.—CAR MOVER.—H. B. Morrison, Le Roy, N. Y.
I claim, 1st, In a car mover constructed as described, the two driving wheels, D and E, placed in line with each other, so as to run upon the same rail of the track, and connected to each other with an endless chain, F, substantially as herein shown and described and for the purpose set forth.
2d, The combination of a side wheel, T, with the projecting end of the axle, B, of the car mover, substantially as herein shown and described, and for the purpose set forth.
3d, The driving wheels, D and E, constructed with grooves of peculiar shape for the reception of the endless chain, F, and to enable them to hug the rail more closely, substantially as herein shown and described.
4th, The combination of the elbow lever, G, R, bars, F', and O, K', and pawls, A, and H', with each other and with the cog wheel, J, formed upon or attached to the driving wheel, D, substantially as herein shown and described, for the purpose of operating the machine.
5th, The combination of the adjustable slide, E', with the bars, F' and D', substantially as herein shown and described and for the purpose set forth.
6th, The combination of the adjustable slide, P', with the lever, G', and bar, O', substantially as herein shown and described and for the purpose set forth.
7th, The combination of the reversible pawl, A', having a handle, a2, attached to its upper end, and coiled spring, C', with the socket, B' and cog wheel, d', substantially as herein shown and described and for the purpose set forth.
8th, The combination of the pawl, H', having a handle, h', attached to its upper end, with the cog wheel, d', and socket arm, F', with each other and with the cog wheel, d', and bar, K', substantially as herein shown and described and for the purpose set forth.

9th, The combination of the bar, K, slide blocks, N and O, screw, P, adjustable bars, M, U, slide, V, adjustable standard, R, and pivoted socket, S, with each other and with the elbow lever, T, W, and frame, G, substantially as herein shown and described and for the purpose set forth.

10th, The combination of the slide bar, T', with the frame, A, of the machine, b, substantially as herein shown and described and for the purpose set forth.

11th, The combination of the guide stays, A2, with the shaft, H, ferrules, B2, and sockets, S, substantially as herein shown and described and for the purpose set forth.

75,448.—SUSPENDING SCALE PAN.—Richard Murdoch, Baltimore, Md.
I claim, 1st, A dish for spring balances, constructed with two or more bowed arms, a, a', so operating that they can be folded together when not in use, substantially as described.
2d, The combination of the standards, s, s, sliding rings, t, t, and pivoted arms or balls, a, a', substantially as and for the purposes set forth.

75,449.—TINNING.—Peter Naylor, New York city.
I claim the means, herein specified, for applying flux to the interior of a length of lead pipe previous to tinning the same with melted tin, as specified.

75,450.—HAY RAKER AND LOADER.—W. T. Nichols, Rutland, Vt.
I claim, 1st, The combination of the gathering and loading rake, q', q', etc., and the supplementary elastic teeth, q, q, substantially as and for the purposes set forth and described.
2d, The combination of the vibrating gathering rake, and the auxiliary loading frame, f, substantially as set forth and described.
3d, Driving the auxiliary loading frame, f, by the carrying wheels, a, or their equivalent, said wheels being attached to and vibrating with the gathering frame, q', q', substantially as set forth.
4th, The combination of the land wheel, a, pinions, b and c, cranks, d, and rock shaft, e, substantially as and for the purpose set forth.
5th, The small wheels, n, n, located between the teeth, q', q', and having their bearings attached to said teeth, substantially as set forth.
6th, The connecting frame, i, i, attached to rake frames, as and for the purposes set forth and described.

75,451.—LUNCH BOX.—Peter H. Niles, Boston, Mass. Antedated March 6, 1868.
I claim a portable collapsing lunch box, composed of a top and bottom, in combination with double-acting end pieces and single-acting sides, substantially as described.

75,452.—HORSE HAY FORK.—S. Page, McAlistersville, Pa.
I claim the strap, D, provided with slots, x, x, in the upper ends of which is a jog or offset, the rod or bar, F, and its hooks, G, G, the frame, E, tin es, J, J, and lever, H, with its cord, the several parts being constructed, used, and operating in the manner and for the purpose set forth.

75,453.—SKATE-BUCKLING TONGS.—Wm. P. Patton (assignor to James M. Foster), Harrisburg, Pa.
I claim the within-described tongs, when constructed substantially as and for the purpose herein set forth.

75,454.—AUGER.—Ira T. Payne, Chester, Conn. Antedated February 28, 1868.
I claim the projection, C, on the floor-rip, for the purpose set forth.

75,455.—PLOW.—John D. Peck, Triangle, N. Y.
I claim the application of a cap or roof to the common farm plow, as herein described, and for the purposes herein set forth.

75,456.—FORMING HORSE-SHOE BLANK.—Charles H. Perkins, Providence, R. I.
I claim the improved double blank for horse-shoes herein described, as an article of manufacture.

75,457.—MACHINE FOR ROLLING AXLES.—Wm. P. Porter, Pittsburg, Pa.
I claim the combination of the adjustable rolls, A and B, and the roll, C, constructed and arranged in relation to one another, and to the frame which supports them, as and for the purpose herein described.

75,458.—ARMLET PORT-MONNAIE.—Aaron W. Pratt, Pultneyville, N. Y.
I claim the combination of the retaining-bolts, I, lock, f, slotted box, A, c, c, and retaining-bands, B, B, as herein shown, and for the purpose described.

75,459.—VALVE GEAR FOR STEAM ENGINE.—Robert L. Reaney, Jersey City, N. J., and John S. Cornell, Brooklyn, N. Y., assignors to John S. Cornell and H. F. Pease, Brooklyn, N. Y.
I claim, 1st, The arrangement of the cylinder, B, the valve passages, b, c, d, e, and inlet and outlet pipes, I, J, so that the steam chest, K, and cylinder, c, being in one piece, may cover both the end of the cylinder, its valve, and passages, substantially as shown and described.
2d, The construction and arrangement of the valve, L, the shaft, C, and its eccentric pin, g, relatively to the cylinder, B, connecting rod, F, and rod or ram, G, essentially as shown and described.
3d, The slide valve, L, with its ears, h, h, acted upon by an eccentric pin or roller on the end of the main shaft, c, as shown and described.

75,460.—WHEEL HOE.—Edmund D. Reynolds and O. Bradford Reynolds, North Bridgewater, Mass.
I claim, 1st, In combination with the center blades, h (made vertically adjustable), the rear blades, l, made adjustable, both vertically and laterally, substantially as shown and described.
2d, Supporting the vertically-adjustable standards between guide-lips, g, substantially as described.
3d, In combination with the plate to which the blades, l, are secured, the laterally-sliding supports, m, substantially as described.
4th, Forming each hoe-blade, a, and its standard from a plate, bent both at right angles, and with an inclination rearward, substantially as shown and described.
5th, Forming the standard of the two forward blades, by welding together the two vertical plates, substantially as described.
6th, In a hoe in which the blades are made adjustable, as described, applying the handle with provision for vertical adjustment, substantially as set forth.

75,461.—COTTON BALE TIE.—E. S. Roberts, Columbus, Ga.
I claim the cotton bale tie, constructed as described, and consisting of the open box, B, provided near each end with a transverse removable pin, b, around which the hoop, A, passes, the extremities of said hoop, after passing around the pins, being bent back between the bale and the hoop, in which position they are held by the outward pressure of the bale, all arranged as described for the purpose specified.

75,462.—LATHE FOR TURNING BUTTONS.—D. C. Robie (assignor to himself and H. E. Bostwick), Springfield, Mass.
I claim, 1st, The two spindles, B and C, operated by a shipper, so as to bring them alternately against the stock at opposite sides, when constructed and arranged substantially as described.
2d, The clutch, consisting of the stationary jaw, m, and pivoted jaw, n, operated by the treadle, K, and spring, L, arranged and constructed substantially as shown, when used in connection with my device, in the manner described.

75,463.—CHANGEABLE ESCAPEMENT FOR WATCHES.—Geo. Frederic Roskopf, Chaux de Fonds, Switzerland, assignor to himself and Jules D. Huguenin, Vuillemin, New York city.
I claim, 1st, Placing or attaching the escapement of a watch to a separate or independent plate or frame, applied or fitted to the plates or frame which contain the "train" or other parts of the watch movement, in such a manner that the escapement attached may be removed at will, and another escapement substituted therefor, substantially as shown and described.
2d, The slot, i, in the escapement plate, B, and the screw, k, inserted therein, or an equivalent means for the purpose of adjusting the scape wheel and the lever pallets in a proper relative position with each other, substantially as set forth.

75,464.—BASIN FAUCET.—Robert P. Ross, Bethlehem, Pa.
I claim, 1st, The cap, C, when made hollow for the reception of the stem of the valve, D, said valve having its seat upon the tube, A, within the chamber, B, as herein described for the purpose specified.
2d, The valve, D, in the tight cap, C, fitting into the upper end of the chamber, B, the packing, E, of said valve resting upon the upper end of the stem, A, when the water is shut off by turning down said chamber, and lifted above the end of the stem, A, when the water is turned on, by turning up said chamber, as herein shown and described.

75,465.—LUBRICATING BOX.—Thomas J. Rowley and Wm. Poland, Chillicothe, Ohio.
I claim the lubricating box, C, when provided with the central annular chamber, a, surrounding the central portion of the thimble box, B, and communicating with the wrist, A, by means of the transverse openings, c, all constructed and arranged as described for the purpose specified.

75,466.—MACHINE FOR PLANTING COTTON SEED AND CORN.—Andrew Runstetter and Albert Windeck, Peoria, Ill.
We claim, 1st, In a convertible corn and cotton planter, the movable metallic box, O, having separating wires, w, x and y, in combination with the revolving forks, d, e, f, and the spring, F, substantially as set forth.
2d, The combination in such a machine of the perforated block, Q, drill, R, cut-off, S, and tongue, T, so constructed and arranged that they may be, alternately with the cotton seeding mechanism, attached substantially as set forth.
3d, The combination of the reciprocating cogged slide, I, rollers, o, g, adjustable crank, K, and driving rod, J, for communicating motion from the roller, P, to the seeding mechanism of either the corn or cotton planter, substantially as set forth.
4th, The combination of the drill teeth, b, track clearers, a, and harrow, q, arranged substantially as set forth.

75,467.—LAMP.—Lewis J. Sagendorph (assignor to himself and Samuel C. Moore), Boston, Mass.
I claim the blaze cap, C, constructed with reference to the imperfect base plate, B, as to direct the air to the flame through an annular passage or opening around the blaze cap, in the manner and for purpose specified.
Also, supporting the blaze cap by pins resting in slots in the upright flange, B', of the base plate, in the manner described.

75,468.—MACHINE FOR CARBURETTING AIR.—James Sangster (assignor to himself and Daniel H. Burtiss), Buffalo, N. Y.
I claim, 1st, The construction and arrangement of the air wheel, A, in combination with the guard, B, substantially as and for the purpose herein described and set forth.
2d, The arrangement and form of the frame, M, as and for the purpose described in claim third of this specification or description.
3d, The combination of the weight, A4, and tube, C4, as and for the purposes described.
4th, The coupling, R5, as and for the purposes herein set forth and described.

75,469.—MACHINE FOR CARBURETTING AIR.—James Sangster (assignor to himself and Daniel H. Burtiss), Buffalo, N. Y.
I claim, 1st, The combination of an air forcing wheel with a stationary air tube and a non-forcing air chamber, I, provided with openings, K, the whole being constructed to operate substantially as and for the purposes herein set forth and described.
2d, The combination of an air-floating vessel, D, and an air-discharging tube, the discharging end, E, of which projects above the carburetted liquid, as and for the purposes substantially described.

3d, The supplemental tube, F₂, as and for the purposes substantially as described.

4th, The tapering movable gas holder, A, as and for the purposes substantially as described.

75,470.—APPARATUS FOR DISTILLING SPIRITUOUS LIQUIDS.
Wm. Shilling, Baltimore, Md.
I claim, 1st, The combination of the condenser, J, and the low-wine reservoir, L, or their substantial equivalents, with the doubler and the cooler, C, essentially as described.

2d, The combination of the low-wine reservoir, L, and condenser, J, with the cooler, C, and the meter, substantially as described.

3d, The low-wine reservoir, L, arranged in relation to the doubler, for the purposes substantially as described.

4th, The combination of the low-wine reservoir, and the condenser, or their substantial equivalents.

5th, The condenser having its bottom sunk and its top raised, in the manner and for the purpose substantially as described.

6th, The perforated disk, p.

7th, The condenser having a collar, d, essentially as described.

8th, The combination of the supply pipe, s, and cock, S, and draw-off cock, X, or their equivalents, with a condensed substantially as described.

75,471.—HOLDER FOR RAZOR STROP.—Geo. Scott, Steubenville, Ohio.
I claim, a new article of manufacture, the razor strop, when the leather thereof is secured to the curled ends of the spring steel back, whereby said leather is prevented from slackening by stretching, and is kept in a constant state of tension, as herein shown and described.

75,472.—STOVE DRUM.—Emel Selbach, Columbus, Ohio.
I claim the pan, D, in combination with the drum, C, operating and arranged substantially as and for the purpose set forth.

75,473.—COMPOSITION CEMENT FOR PAVEMENT, ETC.—A. M. Shaw, Lebanon, N. H.
I claim a cement for pavements and flooring, roofing, and other purposes, composed of the ingredients above named, mixed, applied, and finished in the manner above described.

75,474.—FRAME FOR HOP VINE.—A. Shoemaker and W. Phelps, Conesville, N. Y.
We claim an improved hop-vine frame formed in squares of four stakes, a, joined together at top by the cross ties, b, b, in combination with the bent poles, c, c, arranged as and for the purposes herein described.

75,475.—RAILROAD CHAIR.—W. S. Shotwell, Paterson, N. J.
I claim, in chairs for railroad rails, holding the rails by sheet metal presented edge-wise to the rails, substantially as and in the manner herein set forth.

75,476.—RAILWAY TRUCK.—W. S. Shotwell, Paterson, N. J.
I claim, 1st, The wheels, D, with grooved periphery, in combination with shaft, B, provided with a flange or flanged collar, a, substantially as and for the purpose specified.

2d, The arrangement of the bars, H, H, with the cross ties, K, K, the wheels, D, D, and the axles, B, B, whereby I am enabled to have a double number of bearings, and to have said bearings at an desirable point between the wheels A, or outside of them if necessary, as is herein fully set forth.

75,477.—BRIDGE.—F. H. Smith, Baltimore, Md.
I claim, 1st, A bottom chord, formed of clusters of rods connected, as described, in the panels and connected to each other through the brace blocks, by a single rod, substantially as and for the purpose specified.

2d, The combination of the clusters of rods, D, nut plates, E, single rods, G, angle blocks, B, and nuts, H, with each other, with the horizontal cross rods M, by which the various lines of clusters are connected to each other, and with the vertical rods, I, by which the bottom chord and superstructure of the bridge are connected together, substantially as herein shown and described and for the purpose specified.

75,478.—CLOTHESPIN OR CLASP.—H. C. Smith, Dublin, Ind.
I claim the within-described clothes clasp, made of india-rubber, and having the aperture, a, side dividers, b, and projections, c, c, substantially as and for the purpose herein specified.

75,479.—LAMP.—W. H. Smith, New York city.
I claim, 1st, The round wick tube, A, provided with a flange, K, on its outside, and a passage, B, in combination with the worm pipe, D, constructed with an inward flange at its top, substantially as herein shown and for the purposes described.

2d, Constructing the wick tube, A, with a slot, B, made in the manner and for the purpose substantially as herein shown.

3d, Providing the top opening, e, of the tube, M, arranged in relation to each other, substantially as and for the purpose herein set forth.

4th, The construction and arrangement of the top edge of the spiral tube, D, being below the edge of the tube, A, for the purpose of preventing the flame to reach the tube, D, and heating the burner, substantially as herein shown.

5th, The tube, F, tightly jointed, and uniting with the wick tube, A, substantially as and for the purpose herein described.

75,480.—FLY TRAP.—Albert Snyder, Jackson, Mich.
I claim the combination of the dome, A, and platform, C, with the holes, I, I, dien, D, and rim, B, as and for the purpose set forth.

75,481.—HORSE HAY FORK.—Harvey B. Steele, West Winfield, Conn.
I claim the shield or scabbard, A, constructed as described, in combination with the lever, B, E, connecting rod, F, and prong, G, arranged and operating substantially as and for the purposes set forth.

75,482.—PHOTOGRAPHIC PRINTING APPARATUS.—J. Stehman, Lancaster, Pa.
I claim the additional printing process, substantially in the manner specified.

75,483.—LAMP BURNER.—C. St. John, Charleston, Mass.
I claim, in combination with the wick tube applied to the cap-crow or lamp body, so as to be movable vertically, relatively to the air-deflector or chimney supporter, substantially in manner as specified, the foraminous cup or guard, D, made and arranged with the chimney supporter and the air deflector, substantially as specified.

Also, the improved lamp-burner as composed of the chimney-holding springs, I, the chimney-supporting cone and air-deflector, C, the perforated cup, D, the standards, B, E, the screw cap, B, and the wick tube, A, and its guide, K, as described, and having the wick movable in the cap, B, and guide, K, by means and in manner as described.

75,484.—TRUSS PAD.—Fred. A. Stohlmann, Brooklyn, N. Y.
I claim a truss pad, formed with spring-fingers, padded and attached to the truss spring, as and for the purposes set forth.

75,485.—SYRINGE.—Fred. A. Stohlmann, Brooklyn, N. Y.
I claim a syringe with a hollow piston rod, d, piston, e, screw-head or cap, b, and neck, g, as and for the purposes set forth.

75,486.—HORSE HAY FORK.—Hiram C. Stouffer and Abraham Stouffer, Bever Township, Ohio.
We claim the tines, B, C, links, E, D, and shaft, A, in combination with the lever, F, all constructed and arranged to operate in the manner as set forth.

75,487.—MACHINE FOR FORMING TUBULAR BEADS ON SHEET METAL GUTTERS.—O. W. Stow, Plantsville, Conn.
I claim the combination of the cam lever, F, G, with the pivoted jaws, D, D, whereby the jaws are closed to form the bead, substantially as described for the purpose specified.

75,488.—BOLT FASTENING.—Enoch E. Stubbs, West Elkton, Ohio.
I claim the combination of key, d, dog, a, and spring, e, with the clasp, D, and recessed bolt, A, when the several parts are constructed, arranged, and operated conjointly in the manner and for the purpose specified.

75,489.—CAR COUPLING.—A. W. Sullenberger, Laurel, Ind.
I claim, in combination with the shaft, E, segment, D, and pin, C, suspended therefrom, the yoke, H, and trigger, G, for holding the pin suspended in a vertical position and dropping it automatically, on the entrance of the link into the drawhead, substantially as described.

75,490.—SPRING BED BOTTOM.—Richard Tattershall, Beloit, Wis.
I claim the employment of the device herein described for securing the supporters, C, to the bedstead, D, as set forth.

Also, the guard bands, H, or their equivalent, in combination with the supports, C, brackets, E, locking pins, h, h, the transverse slat, I, rubber springs, B, and the frame, A, as described, and arranged substantially as herein set forth and described, for the purpose specified.

75,491.—COAL STOVE.—Jasper Van Wormer and Michael McGarvey, Albany, N. Y.
We claim, 1st, In base burning or magazine stoves, a funnel or hopper attached to or supported by the top or outside casing of the stove, in combination with the open top magazine cylinder, K, as and for the purpose set forth.

2d, The perforated check-draft plate, I, in a downward draft flue, provided with a register, X, so arranged as to pass the soot and ashes that collect upon them, through the register and plate, into the escape flue, when the register is traversed for that purpose.

75,492.—TELEGRAPH POLE.—Cromwell Fleetwood Varley, New York city.
I claim the combination of a conducting wire, running to the ground, with the telegraph pole and the insulators attached thereto, substantially as and for the purpose set forth.

75,493.—PHOTOMETER.—Dr. H. Vogel, Berlin, Prussia, assignor to Wilson & Hood, Philadelphia, Pa.
I claim, 1st, The arrangement of the transparent paper strips, C, which are arranged in steps, and which are divided into sections, each section having an opaque partition, substantially as herein shown and described.

The box, A, is provided with a cover, B, having a glass plate b, and the step-formed paper, C, and with the sliding false bottom, D, pressed against the paper, C, by means of a spring, E, as set forth, all made and operating substantially as herein shown and described.

3d, The paper strips, saturated with alkaline chromate, when they are applied to a photometer, substantially as herein shown and described.

75,494.—ATTACHING HORSESHOE.—John Wagner, Washington, D. C.
I claim attaching the bands, C and D to a horseshoe, B, in the manner substantially as shown and described and for the purpose set forth.

75,495.—DEVICE FOR CONVERTING ROTARY INTO RECIPROCATING MOTION.—Eaton Walker, Dundee, Ill.
I claim the combination of the wheels, A, provided with the cams, a, the oscillating lever, D, provided with the friction rollers, f, and the arm, F, all constructed and arranged to operate substantially as described.

75,496.—VAPOR BURNER.—Thomas Ward, Columbus, Ohio.
I claim, 1st, The application of the double packing, H and I, to regulate the fluid and gas, as set forth in the above specification.

2d, The brass or metal plate, F, having the lower end formed into a cup, D, attached to the burner, and its upper end bent inward toward the generating chamber, all constructed as herein shown and described in relation to the aperture, g, substantially as and for the purposes set forth.

75,497.—OIL FOR PAINT, ETC.—William Ward, Cleveland, O.

I claim, 1st, The herein-described compound, consisting of the waste and linseed oil, or its equivalent, when compounded in the manner, and in any proportion, for the purpose substantially as set forth.

2d, The cement, consisting of waste, linseed oil, and lime, or its equivalent, when compounded in the manner and for the purpose substantially as described.

3d, The utilizing of the waste from the bleaching apparatus of paper mills, by compounding the said waste with linseed oil, or its equivalents, or with crude petroleum, or with its distillates; also, in compounding the same with lime in its various conditions, and with the pigments used for paint, in the manner substantially as described.

75,498.—PLANER'S CHUCK.—William H. Warren, Worcester, Mass.
I claim, 1st, The improved planer's chuck herein described, when its several parts are constructed and arranged substantially as set forth.

2d, The sliding jaw, G, having the slotted blocks, E, E, attached thereto, in combination with bed plate and set screws, all constructed as and for the purpose set forth.

3d, The subject matter of second claim, in combination with the movable pins, C, C, when arranged to operate in the manner substantially as specified.

75,499.—INKING APPARATUS FOR COLOR PRINTING.—Lawrence B. Waterman, Indianapolis, Ind., assignor to John Carlton & Co.
I claim, 1st, The screw rod, D, and nuts, e, e, in combination with section-rollers, c, c, and gaskets, c', c', all combined and arranged substantially as and for the purpose set forth.

2d, The inking roller, I, provided with the removable shaft, K, working in a sliding bearing, H, in combination with the distributing roller, J, having fixed bearings, J', substantially as and for the purpose set forth.

75,500.—DEVICE FOR WEAVING CHAIR SEAT.—G. A. Watkins, Proctorsville, Vt.
I claim a needle or shuttle, of flat shape or bar form, constructed as described, to hold the splints at their one end in such a manner as that the splints may be readily detachable therefrom after it has been passed through the warp, and shaped to form a batten for beating up the filling, substantially as specified.

75,501.—CAR BRAKE.—James White and Thomas Lingle, South Amboy, N. J.
We claim, 1st, The suspended frame, C, in combination with the shaft, E, axle, A, and band, d, and the devices for preserving the tension of the band, substantially as described, for the purpose specified.

2d, The sliding clutch and sleeve, F, with brake chain, G, attached, substantially as described, for the purpose specified.

3d, In combination with the axle, the rod, e, pin, f, bell crank, g, and rod, h, substantially as described, for the purpose specified.

4th, The self-acting gear, when the same is arranged for the purposes set forth, and when consisting of the adjustable bar, j, arranged as described, in combination with the bar, e, bell crank, g, or its equivalent, and rod, h, all made and operating substantially as and for the purpose herein shown and described.

5th, The adjustable gage, i, in combination with grooved sleeve, F, and rod, e, substantially as described, for the purpose specified.

6th, The device for operating the brakes by the chain, G, said device consisting of the arrangement and combination with the lever, K, of the lever, O, having an arm, r, the sliding bar, N, spring, s, and pulleys, p, p, and q, all made and operating substantially as and for the purposes herein shown and described.

7th, The lever, K, in combination with the lever, O, and chain, L, for the purpose of combining the hand brake with that which is operated from the locomotive, substantially as set forth.

8th, The ratchet wheel, k, and spring pawl, l, in combination with the sleeve, F, all constructed as described, for the purpose specified.

75,502.—BRIDGE.—T. B. White, New Brighton, Pa.
I claim the clamps and packing blocks, E, F, and G, made of wrought iron, and constructed and arranged for use substantially as described, and for the purposes set forth.

75,503.—HOT DRYER.—Jonathan Whitney, Fort Winnebago, Wis.
I claim, 1st, A hot dryer, consisting of a drying room, E, and store room F, and provided with a curved frame, B, having tilting drying floors, mounted on a track, D, all constructed and arranged to operate substantially as described, and for the purpose set forth.

2d, The curved frame, B, and tilting drying floors, A, constructed and arranged to operate substantially as described, and for the purpose set forth.

75,504.—PAVEMENT.—C. Williams, New York city.
I claim the construction and arrangement in a wooden pavement of the blocks, A, in such a manner that double dovetailed grooves shall be formed between said blocks, so that when the same are filled with cement, as herein described, such filling will operate as a tie to said blocks, substantially as set forth.

75,505.—WATCH CASE.—Gile J. Willson, Reading, Pa.
I claim, 1st, The application of a separate entire ring to the center of an ordinary watch case, new or old, which the movement of the watch will connect with, in the manner set forth, made of any convenient material, and of any size, shape, or form, to answer the purposes set forth.

2d, The application of a conical pointed tube, with its bearing or packing on the movement of a watch or some elastic substance, and connected with the cap of the watch in any convenient manner, to answer the purposes set forth.

75,506.—DOVETAIL MACHINE.—Robert Wolf, Burlington, Iowa.
I claim, 1st, The combination of the cam, F, and jointed lever, G, with the fork, f, pin, g, and carriage, I, all made and operating so that a suitable oscillating motion is imparted to the carriage, I, substantially as and for the purpose herein shown and described.

2d, The longitudinally movable frame, H, in combination with the oscillating carriage, G, and laterally movable bed, J, all made as described, and operating with the saw, E, substantially as and for the purpose herein shown and described.

3d, The combination of the lever, K, pawl, J, slotted adjustable pawl, k, spring catch, i, and bed, D, all constructed, arranged, and operating substantially as described.

4th, The combination of the oscillating plate, P, slide, u, levers, M, O, and chisel, N, substantially as described, for the purpose specified.

5th, The levers, o, M, and chisel, N, in combination with the cam, L, operating substantially as described, for the purpose specified.

6th, The combination of the bed, T, tripping levers, b', c', sliding rack, U, and the slide, V, constructed and operating substantially as described, for the purpose specified.

REISSUES.

2,891.—FOLDING CHAIR.—Benjamin J. Harrison, and James Condie, New York city. Patented July 17, 1866.
We claim, 1st, The legs, A, connected by the seat rail, b, at their upper ends, and by the rail, a, near their lower ends, in combination with the pair of legs, B, pivoted at c, to the legs, A, and united only at their upper ends at the seat rail, C, as specified, so that the rail, b, can pass entirely through, beneath the rail, c, when the legs are folded, as set forth.

2d, The seat rail, C, into which the side pieces or arms, E, of the back are framed, and extended through to the bar, G, in combination with the tie bolts, G, that connect the legs, E, and forms the axis on which the back E' swings, substantially as specified.

3d, Connecting the frame forming the back to the folding legs by a riveted bar or pivots above the point at which the flexible seat is united to the back seat rail, substantially as set forth, so that the flexible seat maintains the back in an upright position.

2,892.—BASKET.—Lansing Marble and Townsend North, Vassar, Mich., assignees of Lansing Marble. Patented Jan. 7, 1862.
We claim, 1st, A basket formed of two series of overlapping splints, A, A', substantially as described, and fastened in any suitable manner.

2d, In combination with the above, the hoops, a, D and G, G, substantially as and for the purpose specified.

2,893.—HYDROCARBON VAPOR APPARATUS.—F. S. Pease, Buffalo, N. Y. Patented March 13, 1860.
I claim, 1st, The combination of the box, A, one or more pans, B, for containing hydrocarbon liquid, the supply pipe, C, at or near the top, the exit pipe, D, at or near the bottom, and the condenser, E, the whole operating substantially as and for the purposes herein set forth.

2d, Condenser employed in connection with an air-bureting apparatus, substantially as and for the purposes set forth.

3d, The combination with the pans or trays, B, of the perforated plates b, through which the air passes in its course through the carbureting chamber.

2,894.—FRUIT BOX OR BASKET.—Jabez W. Hayes, Newark, N. J. Patented Aug. 12, 1866.
I claim, 1st, A box or basket formed of veneers or laminae of wood, laid across each other and turned up to form the sides, so that the bottom is made of two thicknesses, setured together substantially as specified, and the sides of single thicknesses.

2d, A box or basket formed of veneers of laminae of wood, crossing each other at the bottom and turned up to form the sides, in combination with a cord, or its equivalent, passing around the sides to hold them together, substantially as set forth.

3d, A box or basket in which on laminae of woods forms, two of the sides and one thickness of the double bottom, substantially as set forth.

2,895.—COAL STOVE.—J. J. Savage, Troy, N. Y. Patented Feb. 12, 1867. Division B.
I claim, 1st, Constructing a heating stove with its fuel doorway or aperture B, below and forward of its flame or combustion chamber and contiguous to or adjoining its fire box A, in manner substantially as and for the purposes herein set forth.

2d, The combination of the fuel doorway or aperture B, and fire box A, extended contiguously thereunder, as applied to heating stoves in manner substantially as and for the purposes set forth.

3d, In combination with a heating stove having its fuel doorway in the position as herein described, the employment thereof of a lifting lever, F, substantially as and for the purposes set forth.

4th, In a heating stove, in combination with its fire box back lining plates E, in position between the flame chamber C, and the said fuel aperture, in manner substantially as and for the purpose set forth.

5th, In combination with a lever lifter F, as applied to heating stoves in manner as herein described, the employment of a holding hook b, and catch ridge c, substantially as and for the purpose set forth.

6th, A heating stove so constructed that fresh fuel may be cast or fed directly into vacant room or open places, previously formed or made for it in, below, and between the ignited fuel or coke, within the fire box of said stove, by the means and operation in manner substantially as hereinbefore fully described and shown, for the purposes as set forth.

2,896.—TRELIS FOR STRAWBERRY AND OTHER PLANTS.—Wm. W. Wilcox, Middletown, Conn. Patented Aug. 27, 1867.
I claim a trellis, a, made substantially as described, with an upright post or posts, e, and branching arms, c, or their equivalent.

DESIGNS.

2,947.—HOOP SKIRT.—Charles S. Chaffee and Charles H. Vandercook, Birmingham, Conn.

2,948.—AX LABEL.—James H. Mann, Lewistown, Pa.
2,949.—REED ORGAN CASE.—John Schatz, New Haven, Conn.
2,950.—TRADE MARK.—Junius Schenck, New York city.

PENDING APPLICATIONS FOR REISSUES.

Application has been made to the Commissioner of Patents for the Reissue of the following Patents, with new claims as submitted. Parties who desire to oppose the grant of any of these reissues should immediately address MUNN & Co., 37 Park Row, N. Y.

[ISSUED FOR WEEK ENDING TUESDAY, MARCH 3, 1868.]

20,647.—GANG PLOW.—Don Carlos Matteson, Stockton, Cal. Dated June 22, 1858. Application for reissue received and filed February 24, 1868.
I claim the arrangement as described, of the false beam, N, goose neck, G, axle, u, lever, j, catch, L, and the system of plows, attached to their frame as set forth, the whole being constructed and operating substantially as and for the purposes specified.

I further claim the gage wheels and irons, v, v, and the axles, w, arranged substantially in the manner as set forth.

19,896.—LAMP.—F. Hannay, Washington, D. C., and Hudson Taylor, Poughkeepsie, N. Y., assignees by mesne assignments of Pascal Plant, Washington, D. C. Dated April 6, 1858. Application for reissue received and filed February 28, 1868.—Division A.
1st, I claim causing a current of air to impinge upon or commingle with the lower or blue part of the flame of a hydro-carbon lamp, through the instrumentality of a cap piece or burner, without the aid of a chimney, substantially as described.

2d, A cap piece or burner, combined with and applied to a hydro-carbon lamp, for the purpose of producing combustion without the aid of a chimney, substantially as described.

3d, Making the cap piece or burner adjustable, relatively to the wick and wick tube, substantially as described.

19,896.—LAMP.—P. Hannay, Washington, D. C., and Hudson Taylor, Poughkeepsie, N. Y., assignees by mesne assignments of Pascal Plant, Washington, D. C. Dated April 6, 1858. Application for reissue received and filed February 28, 1868.—Division B.
1st, I claim combining the cap piece or burner, with the wick tube, or lamp-top of a hydro-carbon lamp, in such a manner that the burner may be thrown back from the wick tube, substantially as and for the purposes set forth.

2d, The combination of a hinged cap piece, or burner, with the means of adjusting the same relatively to the wick tube, substantially as described.

3d, A hinged burner, or cap piece, for a hydro-carbon lamp, substantially as described.

65,168.—VEHICLE.—The American Hard Rubber Wagon Company, New York city, assignees by mesne assignments of John S. Campbell, Newton, N. J. Dated May 28, 1867. Application for reissue received and filed February 28, 1868.—Division A.
We claim, 1st, The bodies of vehicles constructed wholly or in part of india rubber or other plastic material, substantially in the manner herein set forth as a new article of manufacture.

2d, The arrangement of the flanges, b and c, and cross pieces, d, or either of them, in the bodies of vehicles made from india rubber or other plastic material, substantially as and for the purpose specified.

65,168.—VEHICLE.—The American Hard Rubber Wagon Company, New York city, assignees by mesne assignments of John S. Campbell, Newton, N. J. Dated May 28, 1867. Application for reissue received and filed February 28, 1868.—Division B.
We claim the running gear of vehicles constructed of india rubber or other plastic material, substantially in the manner described, as a new article of manufacture.

65,168.—VEHICLE.—The American Hard Rubber Wagon Company, New York city, assignees by mesne assignments of John S. Campbell, Newton, N. J. Dated May 28, 1867. Application for reissue received and filed February 28, 1868.—Division C.
We claim the dash boards of vehicles constructed from india rubber or other plastic material, substantially in the manner herein set forth as a new article of manufacture, whether the dash board be provided with the iron frame or parts thereof or not.

25,209.—ARGAND GAS BURNER.—M. H. Collins, Chelsea, Mass., assignee by mesne assignments of Hippolyte Monier, Paris, France. Dated August 23, 1859. Application for reissue received and filed February 25, 1868.—Division A.
I claim, 1st, The construction of the argand burner, with its grate, a, and external tube, b, of clay, porcelain, or other incombustible, refractory non-conducting material, and with its inner tube and stem of metal, the several parts being combined substantially as herein described.

2d, The combining with the chimney and the base on which it rests, elastic internal supports, q, inclined outwardly from the top towards the bottom, and bearing against the inner surface of the chimney above its base, substantially as and for the purpose set forth.

25,209.—ARGAND GAS BURNER.—M. H. Collins, Chelsea, Mass., assignee by mesne assignments of Hippolyte Monier, Paris, France. Dated August 23, 1859. Application for reissue received and filed February 25, 1868.—Division B.
I claim the glass chimney of an argand or other burner, constructed without a flange upon its base, and having the lower portion cylindrical, and the upper part tapering towards the top, substantially as described.

63,486.—SAW.—Henry Disston (assignee of Charles Disston), Philadelphia, Pa. Dated April 2, 1867. Application for reissue received and filed February 28, 1868.
I claim, 1st, A projection, b, on a detachable saw tooth, having a circular base, adapted to a corresponding recess in the blade, in combination with a shoulder, f, on the latter, against which the said projection may be brought to bear by partly turning the tooth in the recess of the blade, all substantially as and for the purpose herein set forth.

2d, The lips, l, on the edge of the projection, d, of a saw tooth, or on the edge of a recess in the blade, in combination with a groove and recess, m, in the projection or in the blade, substantially as specified.

69,344.—SAD IRON.—A. Y. Hubbell, Elmira, N. Y. Dated October 1, 1867. Application for reissue received and filed Feb. 29, 1868.
I claim the parts, A, B, arranged in combination with a non-conducting substance, an air chamber or vacuum, substantially as set forth and described.

65,580.—MEDICAL PREPARATION.—Charles L. Lege, San Antonio, Texas. Dated June 11, 1867. Application for reissue received and filed February 29, 1868.
I claim a medication produced from the material specified.

44,964.—CLOTHES DRYER.—Lorenzo Ling, Pulaski, N. Y. Dated November 8, 1864. Application for reissue received and filed February 29, 1868.
I claim, 1st, The independently pivoted arms, B, fitted in the head, A, when used in connection with suitable automatic locks or fastenings for the purpose specified.

2d, The slides, C, on the arms, B, provided with the recesses, f, in combination with the points or spurs, e, at the ends of the flanges, a, of the head, A, and the shoulders, g, on the upper edges of said flanges, all arranged substantially as and for the purpose herein set forth.

3d, The employment or use of lines, D, one or more, when applied to the bars, B, to serve as braces or stays, for the same, substantially as shown and described.

67,469.—LUBRICATOR.—G. Waters, Cincinnati, Ohio. Dated August 6, 1867. Application for reissue received and filed Feb. 7, 1868.
The detachable combined glass reservoir and stem, A, having a single aperture so large as to admit of easy filling by "pouring," and at the same time so small as to prevent the discharge of the oil by its own gravity, substantially as hereinbefore described, for the purposes set forth.

Also, the combined tin and socket, D, when made out of a single piece of cast metal, substantially as described and used, in combination with a glass reservoir.

Also, a lubricator, consisting of a glass reservoir, A, attached to the tube, D, by means of the socket, C, and elastic packing, B, as and for the purposes described.

NOTE.—The above claims for Reissue are now pending before the Patent Office and will not be officially passed upon until the expiration of 30 days from the date of filing the application. All persons who desire to oppose the grant of any of these claims should make immediate application.

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[Compiled from the "Journal of the Commissioners of Patents."]
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385.—BOILER ALARM.—Thomas P. Akers, New York city. Feb. 4, 1868.
395.—BUTTONS AND MEANS FOR SECURING THEM TO GARMENTS.—Daniel McL. Somers and Walter S. Atwood, Brooklyn, N. Y. Feb. 5, 1868.
406.—STEAM GAGE.—David M. Greene, Troy, N. Y. Feb. 6, 1868.
408.—SEWING MACHINE.—Thos. A. Macaulay, New York city. Feb. 6, 1868.
422.—LOCK.—Charles H. Eiffler, New York city. Feb. 7, 1868.

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