OFFICIAL REPORT OF

## PATENTS AND CLAIMS

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FOR THE WEEK ENDING JUNE 23. 1868.

Reported Officially for the Scientific American.

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79,048.—CARBURETER.—Henry C. Appleby, Conneaut, Ohio. I claim, 1st, Discharging a current or currents of air into hydrocarbon liquid, by centrifugal force, supstantially as and for the nurposes described. 2d, in combination with a carburring apparatus, the valve, 1, overated by the weighted lever, J, and the serrated disk, H, substantially as and for the purposes described.
79.049.—Device for Grinding Tools.—Daniel W. Ayres,

79,049.—DEVICE FOR GRINDING TOOLS.—Daniel W. Ayles, Sheldon, Ill.

1 claim an implement for grinding or sharpening tools, composed of a stock, gearing, and winding wheel, one or more, arranged to operate in the mannersubstantially as shown and described.

79,050.—LOUNGE.—Lewis H. Baker, Tarrytown, N. Y.

1 claim in combination with a furniture lousge, an extension or folding washtand, arranged and operated substantially as described.

79,051.—Self-locking Shutter Hinge.—E. H. Benjamin, Oak Bill. N. Y. assignor to Gifford. Potter and Company.

79,051. — Self-Locking Shutter Hinge.—E. H. Benjamin, Oak Hill, N. Y. assignor to Gifford, Potter and Company.

I claim, it, The reversible pluile plate, P. provided with a curved recess, the pluile, F. and plu, i, and adapted to be secured to the arm, b, of the right-angled plaie, B, by means of the! tongue, i, and screw, k, all constructed and arranged as described, for the purpose specified.

2d, The perforated projection, G. cast upon the plate, A, and provided with the notched rlb, Z, and semi-circular extension.r, in combination with the recessed pintle plate, P, and risht-angled plate, B, having the stops, S. S. all constructed and arranged as described, to produce a reversible shutter hinge, as berein setforth.

3d, The semi-circular rib, q, or its equivalent, substantially as shown and described, in combination with the screw, k, and the pintle plate, P, for the purpose of holding the latter firmly, all as set forth.

4th, The tongue, i, of the pintle plate, P, or its equivalent, substantially as shown and described, in combination with the slotted projection, b, for the purpose of permitting the tirm attachment of the pintle plate, all as set forth.

79 052 — CARPENTERS' GAGE.—A. H. Blaisdell. Newton Cor-

79,052 —CARPENTERS' GAGE.—A. H. Blaisdell, Newton Cor-

10,002 — CARPENTERS GAGE.—A. H. Blassden, Newton Conner, Mass.

I claim the fingers, E. E. pivoted on the sliding block, C, and operating so that their four ends will always remain in contact with a curved or straight edge, substantially as herein shown and described.

79,053.—PRINTING PRESS FRISKET.—T. W. M. Castle and J.

79,053.—PRINTING PRESS FRISKET.—I. W. M. Castle and J. B. conner, Adriance, ind.
We claim constructing the frisket of the parts, D. D. attached to the typnan, A. spatsantistly as shown, in combination with the pulleys or semi-pulleys, F. springs, E. levers, G. G. and the prongs, e. e. all arranged and applied to operate in the manner substantially as and for the purpose set forth.
79,054.—RAILWAY.—John G. Cross, Brattleboro, Vt.
Iclaim, 1st, The rails, A. formed with rounded heads and branched or arched bases, and having their ends naived vertically to overlap and fit upon each other, substantially as herein shown and described, and for the purpose set forth.

each other, substantingly as become sown and account and set forth.

2d, The combination of 'he two-tie chair, B, having a su -rail, C, formed upon or attached to it, with the overlapping ends of the contiguous rails, A, substantially as herein shown and described, and for the purpose set forth.

3d, The aub-rail, C, made solid with and upon the chair, B, substantially as herein shown and described, and for the purpose set forth.

4th, The detachable sub rail, C, secured to the chair, B, by means of the lug, bs, formed upon the outer lip, 03, of sid chair, and entering a notch or opening in the lower edge of said sub-rail, substantially as herein shown and described.

of in the lower cuse of seasons and the secured to the sub-rail, C, 5th, The ends of the main rail, A, having its ends secured to the sub-rail, C, and to the chair, B, by the bolts, D, and wedge keys, E, substantially in the manner herein shown and described, and for the purpose set forth.

79.055 —Connection for Soft Metal Pipe.—Isaac Davis,

Brooklyn, N. Y.

I casim a lead pipe connection, consisting of the screw clamps, CD, applied pover flanges, a s, and packing, all substantially as and for the purpose set

over flanges, a s, and packing, all substantially as and for the purpose set forth.

79,056 — GRIDIRON.—Clayton Denn, Frankford, Pa.

1 claim. 1st, The gridfron, A, constructed substantially as and for the purpose described.

2d, The combination with the gridfron, A, of the cover, F, substantially as and for the purpose described.

3d, The combination of the gridfrons, A and L, and the cover, F, substantially as and for the purpose described.

79.057.—HARVESTER RAKE.—H. F. W. Deterding, Alton, Ill. I claim, 1st, The wheel, I, rack, J, gearing, c K L, and the shafts, M O Q, all arranged and applied as shown, or han equivalent way, for the purpose of oper ting the endless chain, V, and rake, substantially in the manner as and for the purpose set inth.

2d, The pivoted plate, X, and spring, n. in connection with the recesses, oq, into ennier edge of the plate of the metallic framing, Q, and the bent rake tooth, h x, of the rising and falling rake, all arra ged to operate with the slotted parform, S, substantially as and for the purpose specified.

79.058.—HORSE HAY FORK.—H. L. Doane, Green Oak, Mich.

1 claim, 1st, The swinging tines, E E G, constructed of one piece of metal, when the parts, E E, are cross of as shown, whereby their points are brought obliquely across the points of the fixed times, as and for the purpose herein set forth.

2d, The two pairs of times, A A B B, each formed on one continuous rod

set forth.

2d. The two pairs of tines, A A.B.B, each formed on one continuous rod or bar of metal, and binged together by the cross part, G, and bent eyes, a a, all substantially asshown and described, and for the purpose set forth.

79,059.—HAT BLOCKING MACHINE.—Jacob Eberhardt, New-

(19,009.— ILLI PROCESSION AND ASSESSION TO STANDARD AND ASSESSION TO STANDARD AND ASSESSION TO STANDARD AND ASSESSION TO STANDARD ASSESSION TO STANDARD AND STANDARD ASSESSION TO STANDARD ASSESSION T

elastic male die, A, and metallic female die, C, as herein described for the purpose specified.

79,060.— PASSENGER REGISTER.—John Enright (assignor to himself and James R. Del Vecchio), Louisville, Ky.

I claim, ist. The combination of the doors or bars, F, shaft, B, radial arms, G, having stop pins, g', or the frequency of the tentrance of a car, boat, room, or other pixes, substantially as herein shown and described, and for the purpose art forth.

2d. In combination withthe above and with each other, the toothed wheel, V, attached to a shaft, S, having a single tooth or cog, E', formed upon it, and carrying an index finger, G', the toothed segment or wheel, B', carrying an index finger, I', the dial plate, H', ever or arm, R, pawls, W and A, connection, P, lever, O, road, J, and gong, K', all arranged and operating as set forthfor the purpose specified.

79,061.—UUTLERY.—R. H. Fisher, West Meriden, Conn., assigner to Beaver Falls Cutlery Co., Beaver Falls, Pa.

I claim, 1st. The bifurcated tang, B, provides with books, c., fitting into the recesses in the handle, C, and secured in position by means of the broker. D, fitting into the recesses, b, and over the endor the handle, as heichnehows and described.

in shown and described.

2d, Securing the bifurcated tang, B, to the handle, C, by compressing the arms, a, and slipping the bolster, D, into the recesses, b, as herein shown and described.

3d, Securing the bolster, D, to the handle by means of the rivet, d, passing through the handle between the arms, a a, of the tang, substantially as here.

79,062.—Bevel Square.—W. T. Fisher, Lenoirs, Tenn. 79,062.—BEVEL SQUARE.—W. T. FISHER, Lenoirs, Tenn.

I claim, 1st, The arrangement of the fixed index, G, and movable index, H, with relation to each other, and the stock, A, graduated blade, B and slotted protractor, D, whereby the required angle of the blade with the stock is determined, as herein shown and esserthed.

2d, The described arrangement with the slotted stock, A, graduated blade, B, slotted protractor, D, fixed index flager, G, movable index flager, H, and get screws, E F, all operating as described, for the purposes specified.

79,063.—NECK TIE AND WATCH GUARD COMBINED.—Thomas

79,005.— NECK '112 AND WATCH GUARD COMBINED.— Thomas J. Flagg. New York city.
I claim as a new article of manufacture the combined neck tie and watch guard, A, consisting of the widened part, s1, and the narrow part, s2 s2, the latter being adapted to receive the silde, s3, which is secured to the button of the shirt by its loop, s4, thereby holding the neck tie in proper position on the neck of the weater, the ends, s2, being also provided with a suitable means for attaching to the watch, the whole constructed and arranged as been set forth.

hereinset form. 79,064.—Trace Buckle.—Martin Gayhart,•Young America, perein set forth.

79,064.—TRACE BUCKLE.—Martin Gayhart, Young America, wis.

I claim the combination of the rotary disk, A, having the two diameters, e f and provided with the lever, B, and clamping device, gh, with the horizontal three parts, A A A' A', and B B B B', pivoted together by a rod, a, t lly and vertically adjustable roller, C, slotted arm, D E, blocks, n o, headed

and provided with a rigid tongue, e, corrugated cross piece, A' and B', all constructed and operating substantially as shown and described, and for the

79,065.—HORSE RAKE.—Jacob Ginther, Mier, Ill.
1 claim, 1st, The described arrang ment of the tripstick, d, having a ratchel handle, g, foot, b. pivoted stop rod, e, and spring brace, f, with relation to the hinged bars. I, carrying the rake, A, said bars, I, being adapted to be elevated and lowered by means of the cord, a, drum, o, and lever, J, all as and for the purposes herein shown and specified.
2d, The combination of the ratchet rack and trip stick, substantially as described.

scriced.
79,066.—HAMMER.—J. H. Goodwin, Scotland Neck, N. C. Iclaim as an improved article of manufacture, the tool consisting of the combination of a hammer with graduated handle and tack claw, with a screw driver.construct das described.
79,067.—Sadiron.—James Gray, Newark, N. J. Antedated

79,067.—Sadtron.—James Gray, Newark, N. J. Antequeud June 13, 1863.
I claim, 1st. The cover, D., constructed as described, constiting of the plates be, forming a cold air chamber, the upper plate being slotted for the passage of the arm, e. of the catch damper, G. when arranged below or near the month of the smoke pipe, G. of a tollow, self-hearing smoothing from, substantially as and for the burnose herein shown and described.
30, As-licheating smoothing from, when provided with a perforated cap fixed in the intenor of the hollow iron, with a double cover. D. and with an adjustable damper, G. all made and operating substantially as and for the purpose herein shown and described.
79,068.—WASHING MACH NE.—Wm. Hachenberg, Wild Pigeon. Mich.

19:108 — WASHING MACH NE.— WM. Hachenberg, Wild Figeon, Mich.

I claim the combination of the curved sides, B, bearing the rollers, C, segmental rubber, E, whose journals, e4, are hung in vertical slots, slotted bar, K, connecting bar, G, lever handle, H, shelt, I, shaft, J, bars, K, and spring lever, L, all arranged as described for the purpose specified.

79,069.—Brvel Square.—C. O. Hansen, Memphis, Tenn.

I claim the bevel constructed as described, and consisting of the graduated plate, B, longitudinally slotted, the pivoted arms, A, luss, C, and sliding clamp nut, D, all arranged to operate substantially as herein shown and described.

scribed.
79,070.—LEATHER ROLLER.—J. T. Harris, Swampscott, Mass.
I claim the guards, D and E, wither or both, and whether made separate or in one piece, in combination with the rollers of a leather rolling machine, substantially as herem shown and described, and tor the purposes set forth. in one piece, in combination with the rollers of a leather rolling machine, substantially as herein shown and described, and for the purposes set forth. 79,071.—HOISTING APPARATUS.—Dexter Head, Medusa, N. Y. I claim the lazy tongs, C, arranged to operate in connection with the derick, A, slotted frame, B, the pulleys, cord, e, and windlass, f, as herein described, for the purpose specified.
79,072.—HOP STRIPPER.—Eidney Holt, Baraboo, Wis.
I claim, 1st, The combination and arrangement upon the frame, A, of the fixed and sliding bars, E F, respectively, substantially as and for the purpose set forth.

fixed and shiding bars, E. F., respectively, substantially as and to take purpose set forth.

2d. The combination and arrangement, with relation to the toothed cylinder, J, of the endless carrier, D, rollers, B, and vertically adjustable hangers C, as herein shown and described for the purpose specified.

3d. The toothed bar. L, in combination with the toothed roller, J, substantially as and for the purpose herein set forth.

4th, The described arrangement upon one frame, A, of the hop-stripping device, consisting or the parts, E. F. GH. I, the breaking device, J. K. L. M. N, and the endless carrier, D, passing around adjustable rollers, B, all constructed and combined to operate in the manner and for the purpose substantially as activity.

as set forth.

79,073.—Toy Cannon.—Geo. E. Hutchinson, Cleveland, O., assignor to himself and J. B. Brown, Peekskill, N. Y. I claim a toy cannon having the front end of the bore and having the front end of the bore and having the front end of the epring contined in a sliding barrel. E. in combination with the lever, F. and bin, d, all made and operating substantially as herein shown and described.

79,074.—Horse Power.—J. H. Kleppinger, Cherryville, Pa. 1 claim the wheel, E. with the toothed face, and the loose wheel, F. with the pawls, b, all arranged as described, in combination with the shafts of a borse power, and with the fly wheel, H, mounted on one of them, as specified. 79.075.—Hot Air Furnace.—Wm. H. Lee and Charles M.

T9,075.—HOT AIR FURNACE.—Wm. H. Lee and Charles M. Hardenbergh, Minnespolis, Minn. We claim, 1st, The arrangement and combination of the firmace drum, A, (with the the vertical air tubes, a) the annular flue drums, C, the smoke flues, D and E, and the climney flues, F and J, substantially as described for the purposes set forth.

2d. The partition plates, H, and damper, G, in combination with the furnace drum, A, annular flue drums, C, smoke flues, D E, and chimney flues, F J, as terrin shown and described.

79,076.—SAFETY GUARD FOR MINING SHAFT.—E. O. Leermo, Gold HUI, Nevada.

1 claim the combination with the railroad track and the cage of a mining shart of the automatic safety guard attachment, substantially as and for the purpose described.

2d, The combination of the spring buffer, H, spring lever, E, and slide, D, substantially as and for the purpose described.

79.077.—SMUT MACHINE.—Carl Millar, Sandoval, Ill.

I claim the smut machine. C, with its screen, E, and blower, E, in combination with the brusher, G, blower, H, and screen. E, when constructed and arranged in the manner and to operate substantially as described.

79.078.—MANUFACTURING BUTTER FROM WHEY.—Ira Page, I claim the improved mode of manufacturing butter from whey, substant.

79,078.—MANUFACTURING DUTTER FROM WHEEL—II a Lago, Adams, N.Y.
I claim the improved mode of manufacturing butter from whey, substantially as and for the purpose described.
79,079.—EXTENSION TRESILE OR HORSE.—George H. Pierce and Martin T. Glimsetal, Mineral Point, Wis.
We claim, 1st, The trayeling hoards, B w'; constituting the platform of trestle or horse, substantially as shown and described, in compination with the braces, a sa', and their respective bolts, r r r', all as and for the purpose set forth.

the or norse, substantially as shown and described, in combination with the purpose set forth.

2d, The screws, G, in combination with the crossbar, I, and the hooks, f, substantially as shown and described, and for the purpose specified.

3d, The slotted girders, D D', in combination with the legs, A, platforms.

B B', and bolt, r', substantially as shown and described and for the purposes

specified.
4tb, The plates, m, substantially as shown and described in combination with the braces h, and the slotted girders, D D', all as a ndfor the purpose set

forth.

5th, The cross bars, 1, substantially as shown and described, in combination with the legs. A, braces, h, and slotted girders, D and D', all as and for the purpose set forth

6th, The cross bars, 1, substantially as shown and described, in combination with the screw, G, and legs, A', all as and for the purpose set forth.

7th, The brace, a', when combined with a guide, a', and polt, r', all constructed and operating substantially as shown and described and for the purpose specified.

structed and operating substantially as shown and described and for the purpose specified.

8th, The hooked and hinged cross bar, !, substantially as shown and described, in combination with the legs, A, slotted girders DP, and platform, BP, all as andfor the purpose set forth.

9th, The chains, g, in combination with the bolts, r, and legs, A, all substantially as and for the purpose shown and described.

10th, The nottobes in the legs, A, in combination with a corresponding notch on the girders, and the screw, G, all substantially as shown and described and for the purpose specified.

11th, The clamp device consisting of the metallic strap, k, and eccentric roller, v, substantially as shown and described, in combination with the legs, A', and snpplementary legs, A'', and strips, p all as and for the purpose syctiotta.

legs, A', and snpplementary legs, A'', and strips. p all as and for the purpose set forth.

Bth, The tongue and its groove, e', in combination with the girders, D D', attestationly as shown and described and for the purpose specified.

79,080 — DEVICE FOR STOPPING AND STARTING CALENDER.

ROLLS.—WM. T. Porter, Wilmington, Del.

I claim the rod, F, passing through the roll, A, and connected at one end to the shate. D of the roller and riction disk, by assivel joint, its other extremity fitting within the hub block, H, provide with the hand wheel, G, all constructed and arranged to operate substantially as and for the purpose herein set forth. Durance A. C. Boad, New York, etc. 79,081.—Gas Burner.—A. C. Rand, New York city.

I claim a gas burner in which a movable check is adjustable towards or way from the stationary check, as herein described for the purpose speci-

Ted. 79.082.—ORGAN.—Isaac Roush and J. W. Truby, Otto, N. Y. We claim the grooves, R, in a surface, in combination with a block moving in such grooves, substantially as and for the purpose described. 79.083.—TALIORS' MEASURE.—Wm. Sinnott and John Mc. Naughton Proclem N. W.

Naughton, Brooklyn. N. Y.

We claim the adjustable quadrangular frame, composed of the metal bars on each of which a graduated scale is market, in combination with the vertical bar, d. sliding upon the lower bar, b, of the quadrangular frame, and carrying the adjustable tape measure, G, as herein described nor the purpose

79,084.—PORTABLE STOVE.—Jos. Smallwood, St. Johns, N. B. I claim the f rnace or part, A, and the boiler or part, B, when constructed so that they will slide or fold together, as seen in fig. 2, and when used for the purposes set forth, or in combination with a lamp, substantially as described.

79,085.—MEAT CUTTER.—S. L. Stockstill and H. H. Dille.

Medway, Ohio.

We claim, ist. The inclined slotted plate, E, attached to opposite sides of the shell, A, pellow the spikes, A, whereby, as the two halves of the shell are brought together, the inner edges of the plates fit against each other, to form a partition, as herein discribed for the purpose \*pecified.

2d, A meat cutter consisting of two rollers, B and C, carrying spikes and cutters respectively, and working within a case, A, that is, by means of a slotted partition, E, divided into two compartments, as set forth.

79.086.—SHUTTER OPERATOR.—Martin Streeter, New Haven, Conn., assigner to himself and Artell Austin, Jersey City, N. J.
I claim securing the blind, C, in any desired position, by means of theserew be ndie, G, upon the serew shank of the lever, D, acting upon the curved edge of the plate, E, as hereinshawn and described.

of the plate, E, as heremakum and described.

79,087.—Shoe Lasting.—Peter I hompson, Sardis, Ohio.
I claim is combination with the placers or paris, A A', the jaws, CC, and
springs, ff, constructed, arranged, and operating substantially as shown and

79,088.—THILL COUPLING.—J. T. Thorp, Southington, Conn. I claim the hook, F, applied to thill coupling, and passing through a hote in the thill wire, to operate in the manner substantially as and for the purpose set forth. 79,089.—Tile Bending Machine.—Robert Tyrrell, Sumner,

rod, h, provided with the nut, j, and gudgeon, k all constructed and arranged to operate substantially as herein set forth.

79,090.—INNER SOLES FOR BOOTS AND SHOES.—R. A. Web-

ster, Sandisfield, assignor to himself, John Dowd, and R. J. Dowd, Lee.
Mass.
I claim the inner sele, A, constructed substantially as described, for the
purposts set forth.
79,091.—PLOW.—J. M. Wilson, Lexington, Miss.
I claim, 1st, A plow consisting of the combination of the arrow, C. with
the scraper, D, all made and operating substantially as herein shown and described. seribed.

2d, Providing the scraper. D, with notches, a b, to facilitate its fastenings to the standard, A, and arrow, C, substantially as herein shown and de-

ecribed 79,092.—Apparatus for Converting Motion.—Kenelm J.

Winelow, Montpelier Row, Twickenham Eng.
Iclam, 1st, The combination of the loose hollow drums, C, hinged pawls, D, link connections, E E G friction pulley, H, fixed ratchet wheel R, and shaft, A, all constructed and arranged substantially as and for the purpose hereit shown and described.

shair, A, all constituting and arranged substantian, the herein shown and described.

2d, in combination with the above, the retarding rings, K and spring, L, and also the card, O, and pulleys, Q, all constructed and arranged to operate in the manner and for the purpose nevel shown and described.

79.093.—THREAD CUTTER—C. A. Woodbury, Woodstock, Vt. I claim the thread cutter consisting of the disk, A, having a sharp edge, the notched shield, B, and springs, a, substantially as berein set forth.

79.094.—STEAM GENERATOR.—John Armstrong, New Oriestantially.

the notched sheld, B, and springs, a, substantally as berein set torth.

79,094.—STEAM GENERATOR.—John Armstrong, New Orieans, La.

1 claim the central line or set of vertical tubes, A, in combination with the
outer lines or sets of tuo, s, and with the system of oppositely inclined connecting flues, B, arranged in the manner and for the purpose set forth.

79,095.—WASHNG MACHINE.—A.A. Atherton, Waterbury, Vt.
I claim the combination of the board, D, with the knuckles, and the board,
E, with rollers containing holes which allow the water to flow freely through
them, as and for the purpose specified.

79,096.—WRINGER.—Alfred M. Bailey (assignor to Metropoliton Washing Machine Co.). Middlefield, Conn.

1 claim, is t, in clothes wringers and other machines in which two rolls are
required to operate at varying distances from each other, the employment of
a spring whose ends extend beyond the bearing softhe upper or driven roll,
in the manner described, so that the ends of said roll shall bear against the
spring, at points intermediate between the bearing points of said spring, as
and for the purposes set forth.

2d In a combination with a spring whose bearing points are located with
relation to the points where it is in contact with the upper or driven roll, in
the manner specified, the employment of serews or equivalent devices for
regulating the prea ure of the spring, arranged immediately above the points
where the upper roll bears agamst the said spring as shown and set forth.

3. The berein described combination and arrangement of the spring with
the upper roll, the france, and the regulating screws so that the said spring
may be; readily applied to or removed from the machine.

79,097.—UULTIVATING HOPS.—Nelson Baker, Alganzee, Mich,
I claim the herein des ribed method of destroying inacets upon hop vines
in the open field, by subjecting the vines to the action of pyroligeous, sulpurous, hydrogarbon, or other similar vapors, in the manner specified.

79,098.—MEDICINE FOR HOG CHOLERA.—Joseph P. Ball, Le

79,098.—MEDICINE FOR HOG UHOLERA.—JOSEPH F. Dati, Leunand, Ind.
I claim the improved and newly discovered medicine for the cure and prevation of log choiers, c impounded and prepared of the materials and substances in the manner and proportions, and administered as herein set forth.
79,099.—SAW.—Samuel Barry, Dayton, Ohio.
I claim the mide of attaching the teeth, B and C, to the saw plate, A, substantially as shown and described.
79,100.—IMPLEMENT.—B. F. Bean, Schuykill, Pa.

79,100.—IMPLEMENT.—B. F. Bean, Schuykill, Pa.
1 claim the combined implement herein described consisting of the tongs,
B C, and screw wrench, C D E, the movable jaw of the latter being made adjustable upon the arm or bandle, C by a nut, H, which is fitted to a screw
hreai cut upon the arm, C, the whole constructed and operating in twe
manner and for the purpose specified.
79,101.—WASHING MACHINE.—E. E. Brewster, Cleveland. O.
1 Claim, 1st. The soap drawers, J, in combination with the perforated washboard, B, for the purpose specified.
2d, in combination with the above, the arrangement of the frame, D, brush
H, and standards, C, all arranged to operate in the manner as and for the purjose specified.

79,102.—Machine for Cutting Soap.—David S. Brown, Jr.,

79,102.—MACHINE FOR CUTTING SUAP.—Paviu S. Diown, s., New York city.

I claim, i.t. the combination and arrangement of the bar, B', arms, B B, racks, C, wheels, D, shaft, E, wire frame, H, and bench, A, the whole being mide and operation as hown and described.

2d. The arrangement on the frame, t, of the stamping bar, d, stamps, c c c, teggic-jointed har, e, and 1 ver, b, for the purpose of stamping a number of bars of soap at multaneously the whole being made as shown and described.

3d. The comb hation and arrangement of the soap cutting and stamping devices herein shown and described.

79,103.—CHURN.—Moses Calvert, Marshall, Ohio.

1 claim the construction and combination of the frame, gearing, and dasher, when arranged and operating as he eld described and for the purpose set forth.

76,104.—CAR TRUCK FOR CHANGING GAGES.—Henry T. Car-

70,102.—OAR IRUCA FOR CHARMING GROUPS,—Helly I. Calter Portland, Me.
I claim, 1st, The four shoulders, d d' d" and d"', constructed on the bolster,
B, substantially as and for the purposes set fort.
2d. The combination of the shoulders, d d' d''and d''', with the transverse
rods, substantially as and for the purposes set forth.
3d, The lateral moving rail, e', with its guard rail h', in combination with
the lixed rail and guard rail o and h, substantially as and for the purposes
set forth. set forth.

4th, The combination of the lateral moving rail, o', and guard rail, b', with their bed or beam and friction rollers or trucks, substantially as and for the

purposes set forth.

79,105.—EYELET MACHINE.—George P. Tew, Cranston, admulstrator of Charles W. Clewley, deceased, assignor to American Eyelet Company, Providence, R. I. I claim, 1st, The compound instrument, B, composed of a male cutter, c, a die, a, and a female cutter, o, in combination, constituting the moving instrument in the formation of an eyelet, sub-trantially as described.

2d, The combination of the above described compound instrument, B, with the stationary female cutter, d, "former," e, male cutter, h, end collar, f, substantially as described.

3d, The piston, H, in combination with the die, a, arranged and operated substantially as described for the purpose specified.

79,106.—Horse Hay Fork.—Wm. S. Coffman, Coldwater, Mich.

79,100.—HORSE HAY FORK.— Wm. S. Coffman, Coldwater, Mich.
I claim, in combination with the two parts, A E, of the horse hay fork, hinged together as shown, the spherical rubber spring, G, and boit, k, upon one part, and the keeper or recess, a, on the upper part, the two acting together, substantially as and for the purpose described.
79,107.—HARNESS SNAP.—Edward A. Cooper Buffalo, N. Y. I claim the arrangement with the main body of the hook constructed with a flat plate and inwardly projecting lug, g, and an outwardly projecting thumb piece, h, and a flat spring, E, one end of which is secured to the lug, which receives the screw in the main body, and the other end bears against the lug, g, and having an entirely closed chamber for the spring, as herein described.

79,108.—Extension Ring for Base of Cooking Stoves.— David B. Cox Troy, N. Y.

1 claim an extension ring, A, applied between the base, B, and body, C, of acove, substantially as and for the purpose herein specified.

79,109.—FARM GATE.—Jonathan David, East Enterprise, Ind. 79.109.—FARM GATE.—Jonathan David, East Enterprise, Ind. I claim, 1st, The arrangement of the torked lever, F, and sheave, c, with the articulation of the said lever on the par, a, by means of which the front stile, C, is litted a unultaneously with the drawine back of the bolt, G, in the manner and for the purposes substantially as described. Of the bolt, G, in the manner and to the purposes substantially as described of the bolt, G, in the dium of the slotted supplementary post, B, and guide bolts or screws, n n, or their equivalents, when used substantially in the manner and for the purpose set for h.

3d, The articulated arrangement of the bars, aka2 s, in the stiles, C and C', on the pins, 12 s 4 5 6 7 8 9, by means of which the forward end of the gase may be lifted, and kept no by a pin inserted in the hole, S, over the upper bar D, in the manner as specified.

79,110.—STEAM GENERATOR.—Geo. B. Field, New York city.
1 claim, 1st, A steam generator constructed of cast in on or other cast metal, with a hollow cylindrical but, radiating hollow urma, and a hollow rim contacting the outer ands of said arms substantially as set forth.
2d, Constructing a cast metal steam generator, as above described, with a continuous colargement of the water space from a point between the arms through the same to the central hnb, as described and shown.
3d, The cylinder, C, arran ed as shown and described, and for the purpose set forth.

3d. The cylinder, C, arran ed as shown and described, and for the purpose set forth.

4th, In combination with the section, A, of a steam generator, such as described, a reservoir. E, standing under the main cylinder of said generator and beneath the fire grate, as described.

5th, In connection with the central cylinder, or hub, of a steam generator such as d. scribed, and the enclosed cylinder, C, the annular enlargement, N, for the purpose and with the effect set forth.

6th, In combination with a steam generator composed of one or more sections, as herein described, the safety valve, M, having an orifice as large as the interior dismerer of the cylindrical hub or largest tube of the generator, as set forth and described.

7th, The arrangement of the feed pipe, B, in connection with the centra cylinder or hub of the steam generator described, so that the feed water shall be discoarged at the center of the descending current, as set forth and desvibed.

8th, A steam generator composed of sections. A, in the form of bellow

des rib.d. 8th, A steam generator composed of sections, A, in the form of hollow rings, with hollow radiating arms connecting said rings with a central cylin cer or hub, said sections being placed one above another, and so arranged as to fill the space within the chimney without being embedded in the same, and with the radial arm so disposed as break joint with each other, all as set forth and described.

forth and described.

9th, The tubular rods, J J, arranged to secure the sections, A, to each other, and located outside of said sections, so as to increase the circulation and steam surface, as described.

79,111.—Life Boat.—Lawrence F. Frazee, Jersey City, N. J. I claim, ist. The combination of a heoyant and adjustable bow and stern, so arranged that whichever side of the boat floats uppermost, the desired form may be given to the ends thereof.

2d, The adjustable bottom so arranged that whichever side of the boat is uppermost it may be secured as low as possible, to give room to the feet and legs of the persons carried.

3d, Cocaccting the adjustable bottom to the adjustable bow and stern, in such a manner that when the latter are secured in the desired position, the former 1° also fixed as required.

4th, The provision for stowing bread and water in such a manner that

whichever side of the boat comes uppermost, it is all readily accessible to those on board, all for the purpose and in the manner substantially as de-79,112.—Harvester Pitman.—George B. Garlinghouse and

79,112.—HARVESTER PITMAN.—George B. Garlinghouse and CyrusB. Garlingbouse, North Marison, Ind.
We claim in the pitman connection with the cutter of a harvesting machine, the single conical or conolical pivot or point on the pitman entering into a corresponding hole in one side of the knife-heal; in combination with the clamp or its equivalent, arranged to work on the opposite side of the beel, on a center coincident with the point of the pitman, for the purpose of affording free movement in turning on its center, and to take up the slack caused by wear in working the machine.

In combination with the pitman and cutter bar of a harvesting machine, the separate detachable holding device or claim, D constructed as described for the purpose of keeping the pitman in proper position with the knife heel and to be easily removed.

79,113.—Box.—W. B. Guernsey, New York city.

I claim the improved box, made of veneer, with its sides fitted and cemented into perpendicular grooves in the heads thereof, as a new article of manufacture.

79,114.--Hull of Steamboat.--Wm. Hagerty, Monongahela,

Pa.
1 claim the geometrical system or rule, as illustrated in fig. 1 of the drawings, for drafting the cross timbers, so as to form a sigment of a conoid in the bulls of vessels, substantially as set forth and described.
79,115.—DRILL STOCK.—M. Hainque (assignor to himself and

John Lowth), San Francisco, Cal.

I claim the combination of the drill stock, A, with the lever, D, the plain recorrugated g.b, C, and the sle-ve, B, the said parts being constructed and rranged substantially as described. arranged substantially as described. 79,116.—Joint Clamp.—D. E. Hall, Detroit, Mich.

I claim the herein-described metallic clamp, when constructed in the man er as and for the purpose set torth. ner as and for the purpose set torth.
79.117.—WASHBASIN OVERFLOW AND DISCHARGE PIPE.—B.

Havanagh, New York city. Antedated June 13, 1868.
I claim the 1139, e, and pipe, f, below the drip pan, d, in combination with the hollow column, g, supporting the basin, and arranged to receive its discharge and overflow, as and for the purposes set forth. 79,118 — Sash Balance.—Andrew B. Hester, North Ver

79,118—SABH BALANCE.—Andrew B. Hester, North Vernon, Ind.
1 claim the sash balance consisting of the plate, A, with the pulleys, 123, as arranged thereon, the pulley, B, the cord, K, the cap, C, and the lever, F, the whole constituted and arranged substantially as described.
79,119.—CULTIVATOR.—J. H. Hill, Clinton, Ill.
I claim, 1st, 1 he frames, A and C, and the lever, F, combined and operating substantially as set forth.
2d, The shovel handles, G, arms, H, and connecting bar, I, arranged substantially as described, in combination with the frame, C, and its adjuncts, substantially as and for the purpose set forth.
70 120—COPN PLANTER—I H. Hill and I. T. Hammond. 79,120.—CORN PLANTER.—J. H. Hill and J. T. Hammond,

79,120.—CORN PLANTER.—J. H. Hill and J. T. Hammond, Chuton, Ill.
We claim the combination and arrangement of the slides, H H, and plates, a a, with the tongue, b chute, F, and plow, E, as set forth.
79,121.—FENCE.—W. D. Hillis, Elgin, Ill.
I claim, 1st, The combination of wire rails, E E1, constructed as above described, with the slotted pickets, F F, and the purpose set forth.
2d, The metallic plates, D D, when constructed with the slots and recesses above described, and with the enlarged space, m m, and used in combination with the servey a, and the wirerails, E E1, substantially as and for the purpose.

surpose set forth. emitting the multiplates,  $\mathbf{D}$   $\mathbf{D}$ , when constructed with the slots and recesses emitting that  $\mathbf{D}$   $\mathbf{D}$ , when constructed  $\mathbf{m}$  in  $\mathbf{D}$  and  $\mathbf{D}$   $\mathbf{D$ pose specified.
79.122.—FLOWER FRAME.—C. Hochbrunn, New York city.

claim the frame for flower ormaments, constructed and arranged a shown and described.

in shown and described.

79,123.—Book BINDING.—Amos Holbrook, Jr., Lynn, Mass. I claim, 1st, Connecting two or more signature, and through the shi in the end to the next signature, substantially as described and for the purpose set forth.

2d, Combining with the parallel thread, arrshred as set forth in the first, claim, series of chain stitches, substantially as described and for the purpose set forth.

set forth.
79,124.—GLOBE JOINT.—J. F. Hollister, Plano, Ill.
I claim, 1st, The mode of connecting the globe, C, by means of straps on its poles, or their equivalent, substantially as set forth.
2d, The concaves, KK, and vibratin; bar, B, combined with the globe, C, and pitman, A, the whole constructed and operating substantially as de-

and pitman, A, the whole constructed and operating scribed.

3d, The lips, L L L, for the purposes set forth.

4th, The figure, M, in bar, B, for the purpose set forth.

79,125.—Door SPRING.—S. W. Huntington, Augusta, Me.

1 claim a spring for closing doors, etc., consisting of a strip or cylinder of vulcanized indistribler, and sockets, m m, in which the ends of the same are beld, constructed and arranged is described, and applied to the edge of the door and jamb, to hich the door is hinged in the manner set forth.

the door and jam's, to a medical door is singled in the door and jam's, to a medical door is singled in the door and jam's, to a medical door is singled in the door and jam's, to a medical door is singled in the door and jam's, to a medical door is singled in the door and jam's, to a medical door is singled in the door and jam's, to a medical door is singled in the door and jam's, to a medical door is singled in the door is singled in the door and jam's, to a medical door is singled in the door is si 79,120.—MACHINE FOR MANUFACTURING IELEGRAPHIC CABLE. A. F. Jaloureau, Paris, France.
I claim, 1st, The improved method of forming telegraphic cables by the application of successive layers of bitumen, separated and maintained by spiral bands of bitumenized paper, and consolidated by calls of bituminized twine or yain, the whole protected, when necessary, by an outer covering of metallic wire, substantially as hove specified.
2d. The improved combination of machinery, by aid of which the manufacture of the said cable may be effected with facility, certainty, and ecompany, substantially asherein set forth and shown in the figures of the a company-

ingdrawhigs. 79,127.—Stovepipe Shelf.—H. C. Johnson (assignor to him-

73,127.—STOVEPIPE SHELF.—H. C. JONNSON (ASSIGNOY to Illimsel'tand C. H. Johnson), Delevan, Wis.

1 claim, 1st, a stovepipe shelt, when made in pieces, B and B', with leaves, C and C', secured to a stovepipe, substantially a described.

2d, Loops, D and E, in comoination with hooks, F, to secure leaves, C and C', to the center shelf, B and B', constructed as described, one loop being wide and the other narrow, on each piece, B, to provide for the parts, B and B', being adjusted.

3d, Forming hooks, F, straight, on top, and with the semicircle projection on the bottom, as described, for the purpose of easing down the leaf and bolding it in place.

79 128 — Quarter Boot for Horses — Wm H Jones Bos-

—Quarter Boot for Horses.—Wm. H. Jones, Bos-

ton, Mass.

I claim the quarter boot, as made with one or more grooves, arranged as described, in its outer surface, and especially about its heel, such being to receive the fastening strap or straps, as set forth.

Also, the arrangement of the fastening strap within a groove going around the heel and through either or both the sides or quarters of the boot, in manner substantially as specified.

Also, the boot, as made with a heel projection, a, and the back rest, k, arranged as specified.

Also, the arrangement of the canvass quarter facings with the shoe and the strap rive, s, h, manner as described.

Also, the arrangement of the canwass quarter Licings with the shoe and the stap rive.s, in manner as described.

79,129 — ELEVATOR.—Gilman Joslin, Boston, Mass.
I claim, 1st, The arrangement of the upper sprocket wheels and independent journals, leaving the space between the two wheels open for the passage of the carriage, substantially as described, and for the purpose set forth.

2d, The guide, S, operating in combination with the carriage, substantially as described and for the purpose set forth.

3d, Beveling the bottom of a chain-elevator carriage and arranging the top of the partition, V, substantially as described and for the ruppose set forth.

4th, The narrow tran door, X, arranged and working substantially as described and for the purpose setforth.

5th. The endless chain or band inclosed within guides, substantially as described and for the purpose set forth.

79,120.—GRAIN AND HAY ELEVATOR.—Henry Keck, Canaan, Ohio.

Ohio.

1 claim the combination and arrangement of the windlasses, B B, platform, pulley and crank, c, block and tackle, E E, rake, F, and couble pulley, g, then used in a barn, substantially in the manner and for the purpose as here is hown and set forth.

9,131.—MACHINE FOR GRINDING GLASS PLATE, ETC.—Jonas

19, 151.—MACHINE FOR GRINDING GLASS PLATE, ETC.—Jonas Kendall, South Framingham, and Addison Hathaway, Lenox, assignors to A. T. Serven. Lenox, Mass.

We claim, in combination with the series of disks or grinders, rorating around a common axis and over a reciprocating table, giving to each disk or grinder a positive rotary motion on its own axis, substantially as described.

scribed.
Also, in combination with the rotary grinding disks, the mechanism for automatically effecting their downward movement as the grinding progresses, substantially as described.
79,132.—MACHINE FOR POLISHING GLASS.—Jonas Kendall, South Framingham, and Addison Hathaway, Lenox, assignors to A. T.

South Framingham, and Authorn Hathaway, Lendy, assignors to A. 1. Serven, Lendy, Mass.

We claim the combination of the horizontally reciprocating table, c, the laterally reciprocating carriage, l, the rotary shafts, m, and the polishers, n, when arranged to operate substantially as accepted.

Also, giving to each polisher a capability of upward yielding movements by means of a spring, z, substantially as set forth.

Also, giving to each polisher a capability of rocking movement, substantially as described.

79,133.—IMPLEMENT FOR SHIELDING PLANTSFROM A HOE.—

Also, and of Kirkpatrick Newark, N. I.

Alexander Kirkpatrick, Newark, N. J.
I claim the shield, single or double, for protecting plants from injury by the hoe, constructed in the manner and for the purposes specified.

79,134 — LATHE DOG.—R. H. Lecky, Allegheny City, Pa. Antedated June 6, 1868.
I caim the body, A. cam, B, thumb screw, f, and groove, x, constructed, irranged, and operating substantially as herein described and for the purpose

79,135.—HAY LOADER.—A. W. Lozier, New York city.

Lickim 1st, The detachable pin cleviess, k k etc. in combination with the wheel, B, c instructed, arranged, and operating substantially as and for the purposes describe!

2d, The combination and arrangement of the clevies, the derrick, and the elevating forks, the whole constructed and operating as described and for the purposes set torth.

79,136.-Mode of Splicing Belting.-J. W. Lyder and H

Shreve, Alliance, Ohio. 'e claim the four-lipped metallic belt fastener, A, provided with the ridge, n its upper or outerside, and with or without the hinge, C, arranged and c, on its upper or outer side, and with or without the hinge, C, operating substantially as and for the purposes herein set for the

79.137.—METALLIC HORSE COLLAR.—C. K. Marshall, New Orleans, La. Antedated June 6. 1868.

I claim, 1st, A metallic horse collar, constructed substantially as described and for the purposespecified. 2d, Bracing the metallic plates of which the horse collar is formed, substantially as described and for the purpose specified.

3d, The combination of the plates, A A, rein eyes, c. and trace clips, d.d., when the same are constructed and arrayged substantially as described.

79,138.—Hoisting Apparatus.—J. E. Marshall and J. W.

79,138.—HOISTING APPARATUS.—J. E. Marshall and J. W. Schroeder, Battimore, Md.
We claim, 1st, the revolving cranes, E.E., in connection with the rope, a, and spool, C, arranged and operating substantially as and for the purposes above set 101 h.
2d, The combination of the beveled gear, e, beveled pinions, c.c. clutches, g and b b, spool, C, with brake, h, revolving on the shaft, d, and the rope, a, revolving cranes, E. E. braces, F. F. and buckets, G. arranged and operating substantially as and for the purposes above set forth.
79,139.—POCKET KNIFE.—J. E. McBeth, New Orleans, La. 1 claim the blade, B. with the upper part, a, only sharpened, flanges, C, and

13,159.—I OURET KNIFE.—J. E. MCDEHI, NEW OHEARS, La. I claim the blade, B, with the upper part, a, only sharpened, flanges, C, and concave, c, arranged and operating substantially as and for the purposes terrin set for th.

her-in set forth.

79,140.—FIRE KINDLER.—Josiah McFerland, Clinton, Ill.

1 claim the within described fire kindler or torch, having a hollow bowl

A, filled with porous material, and a perforated burner, R as set forth.

79,141.—FENCE FOR CROSSING STREAMS.—Wm. McFarlin,

19,141.—PENCE FOR CROSSING STREAMS.—With Moraling, Jackson, Ill.
I claim the construction and arrangement of the devices described, substantially as and for the purposes set forth.
79,142.—WASH BOILER.—C. E. Miller. Indianapolis, Ind.

79,142.—WASH MOILER.—U. E. MIHER. INCHARAPOIRS, INC.
I claim a portable wash boiler, having the elevated and p. frorated bottom,
E. from which depend pits, C, having the oblique and perforated directing
plates, D, in combination, with pipe, E, and addustable sponu or spouts, F, substantially as set forth.
79,148.—PUMP.—Geo. F. Nutting, Randolph, Vt.
I claim the combination of the open-bottomed barrel, A, plunger, B, upper
removable part, containing the valve chamber, H, eduction pipe, G, suction
pipe, I, and valve, d, all arranged in the manner and for the purpose herein
described and represented.

described and represented.

79,144.—SPICE CAN.—C. T. Palmer, Norwich, Conn.

1 claim a spice can or powder box as not only made with holes or perforations, a a a, in its cover, but as having a cavity, b, and an annular be id, c, arranged therewith, and with the periphery, d d, of the top of the cover, substantially in manner as explained, and for the purpose or receiving a disk or
plate to cover the periorations, the whole being substantially as specified.

79,145.—SCHOOL SEATAND DESK.—A. E. Roberts, Des Moines,

lows.

Iows.

Iows.

Iows.

Iows.

Iows.

Iows.

Iows.

Iolaim the arrangement of the slate-surfaced folding lid, E, with itsnotched and grooved slats, I, in combination with the grooved frame, P, its flanges, n, stationary seat, A, and book-holding partition, B, the several parts being constructed and used substantially as and ior the purposes set forth.

79,146.—STOCK PUMP.—A. H. Russell, Adrian, Mich.

79,146.—STOCK FUMP.—A. H. KUSSEII, AUTIAII, MICH.
I claim a stock pump in which are combined and arranged the rod, U, running through the born of the pump log, A, the hydrostatic bellows, Z, and the pivotes platforms, C B and D, substantially as sescribed.
79,147.—AUTOMATIC SWING.—J. J. Rymal, Rochester, Minn.
I claim, 1st, The projecting flanges, C C, on top of case, A, whereby it can be attached to the ceiling, substantially as and for the purposes herein set

forth. 2d. The angle and curve, E, in the bottom of case, A, forming bearings, to hang it on brackets attached to a wall, substantially as and for the purposes

many it on orackets attached to a wall, substantially as and for the purposes herein set forth.

3d. The adjustable legs, D. to set it up or take it down at will, substantially as and for the purposes herein set forth.

4th, The adjustable connecting rod, lattached to shat, G, by means of book, J, and which can be litted off and on at pleasure, substantially as and for the purposes herein set forth.

5th, The movable arm, d, on the bottom of lever, F, tastened by means of the thumb screw, e, substantially as and for the purposes herein set torth.

torth.
6th, The combination of lever, F, arranged on the side of case, A, and cam
wheel, B, producing a poleseless vibrating motion, substantially as and for the
purposes herein set forth.
79,148.—LEATHER WORK ORNAMENT.—Lucretia F. Sallee,

19,148.—LEATHER-WORK ORNAMENT.— LIGITOR I. Scalled, Peoria, Ill.
I claim the combination of the cement with the leather, untanned hide, guta perch, and other flexible material, when formed substantially in the manner and for the purposes as berein described.

79,149.—CAR BRAKE.—A. H. Syssaman, Lebanon, Pa.
1 claim a brake for railway cars, having lock, F. wedges, V. arms, G and H. levers, K. K. and L.L. diales, D.E. h. b. o. and T. and rous, P. M. and O, constructed, combined, and arranged substantially as specified.

79,150.—PUMP.—A. H. Schofield and De Witt C. Sterry, Worgers, Mass. cester, Mass.
We claim the disphragm pump having a hollow rod with telescopic connec

tions and operating antistantially as described.
79,151.—Compound for Destructing Bed Bugs and other

Vermin.—Peter See sald, New York city.

I claim, its. In preventive for bedougs a compound which is used as a whitewish for walls, substantially as and for the purpose herein set forth.

2a, The compound, composed of the ingredients herein described, or substantially the same, and for the purpose herein shown. 79,152.-MANUFACTURE OF IRON AND STEEL.-L. Sibert,

79,152.—MANUFACTURE OF IRON AND STEEL.—L. Sibert, Mount Solon, Va.

1 Claim, 1-t, The use of manganese, in combination with common salt, substantially in the manner and for the purposes herein set forth.

2d, The use of epsom salts in the treatment of from in the furnace, for the purpose of purifying the iron.

3d, The method of treatment, herein described, for reducing and purifying the ores and the metal, and for securing uniformity in the quantity of the metal produced.

79,153.—UNIVERSAL JOINT COUPLING.—Wm. Smead, Rochester, N.Y.

I claim the pivoting points, C cast on the jaws of an ordinary universal joint coupling, in combination with the claiming iron, B, constructed substantialy as herein described and for the purposes set forth.

79,154.—Animal and Bird Trap.—G. C. Stamper, Pella, Iowa.

Iowa. I claim, 1st. The combination and errangement of the fixed part, A, and removable half, A', of the case or shell of the trap, with the wheel, B, and platform, C, as and for the purposes set forth.

2d, The box E, when constructed with tors minous top, trap-door bottom, and trap guard, t', and used in connection with the chamber, D, in which the animal is caught, and the box, G, in which he is drowned, in the manner and for the purposes set forth.

animal is caught, and the box, G, in which he is drouded, animal is caught, and the box, G, in which he is drouded for the purposes set forth.

3d, The employment of the underground box, G, in connection with the bottomiess chamber, D, and for the purposes set forth.

4th, The combination of the purpose set forth.

5th, The combination of the purpose set forth.

tially as and for the purposes set forth. 79,155.—WAGON.—G. C. Stamper, Pella, Iowa.

I claim, ist, The springs. B, when attached directly to and arranged to act directly upon the wheels of a wagon or other carriage, substantially as and for the purposes specified and set forth.

2d, The arth-friction rollers, s.\*, we narranged upon the connecting rods,
O O, substantially as and to operate as described.

3d, The spring brace, m, as combined with the lear axle and the spring braces nan n', for the front, substantially in the m.nner illustrated and for the purposes set forth.

purposes set forth.

79,156.—CHURN.—Andrew Stump, Bodega, Cal., assignor to bimselfand Charles Colby. Antedated Junc 6, 1888.

I claim, in combination with the revolving box, A, the interior revolving shait, F, and arms, c, t, together with the clasp, H, and pin. 1, the whole constructed and operating substantially as and for the purpose herein described.

79,157.—Postage Stamp.—J. M. Sturgeon, New York city. Antedated June 10, 1858.

19,107.—FOSTAGE STAMP.—J. M. Sturgeon, New York City. Antedated June 10, 858.

I claim, 1st. Attaching stamps to papers or other surfaces by means of an insoluble muchlage or cement, prepared substantially as herein described for the purpose set forth.

2d. Frinting upon the face or back of the stamp with the colorless and invisible ms above described, or its equivalent, any canceling mark or device which will become visible on being sampened by water or steam, as and for the purpose set forth.

3d. As an article of manufacture, the insoluble muchlage or cement above described.

of, As an article of manufacture, a stamp coated with the insoluble mucliage or cement above quartified.

5th, As an article of manufacture, a stamp having a canceling device printed upon its face or back in the above described coloriess ink, or its equivalent, as and for the purpose described.

6th, As a new manufacture, the colored vegetable printing ink prepared substantially as described.

substantially as described.
79,158.—PLATFORM FOR ROCK DRILLS.—Peter Sweeney and

John Bradburn, New York city.

We claim, in a drill stand, rendered adjustable by means substantially as shown, the adjustable guides, C.C., constructed and operating substantially as and for the purpose set forth.

79,159.—Hook.—Jerome B. Sweetland, Pontiac, Mich.

I claim 1st, The books, A. A. when cast with a chamber and with pins, a and b b, substantially as and for the purposes herein set forth.

24, The triangular plate, B, provided with hook. D, and slots, cc and d, substantially as and for the purposes herein set forth.

34, The combination of the hooks, A. A, triangular slotted plate, B, ring, C, and hook, D, constructed and operating substantially as and for the purposes herein set forth.

79,160.—MANUELCOUDE. OF FERRILIZEDS—Dock A. Tor

79,160.—Manufacture of Fertilizers.—Derk A. Ter Hoeven, Philadelphia. Fa.

I claim the process of making born-dust as a fertilizer, by the combination of steaming, drying and crushing, as a whole operation, in the manner sub-

85antially as aescribed.
79,161.—Cultivator.—Elbert Terril, Cold Water, Mich. 19,101.—CULTIVATOR.—EDIDGE TETTI, CORE WASCI, MICE.
I claim ist, The arrangement, berein described, for connecting the handles,
C.C. and cultivator blades, F.F. with the beam, A, and stationary cultivator
points, E.E., so that the whole may be operated substantially as and for the
purposes herein set forth.
2d, The round pieces, D.D. with their shoulders, c.c., and springs, ff, in combination with the handles, C.C., for controlling the action of the outside cultivators as herein specified.

70.160 - Rockey, F. Mold.—Lancaster, Thomas, Philadelphia.

79,162.—Bo'ltle Mold.—Lancaster Thomas, Philadelphia,

 ${}^{'}Pa$ .

I claim the application of a plug or die of any device to bottle molds, when he same is arranged in the manner and for the purpose above set forth and 71,163.—RAILWAY SIGNAL.—Samuel C. Thornton, Moores-

town, N. J.
I claim Ist, Frame, composed of, CPP, and P', roller, CR, and curtain, C, bevel-geared wheels, BV BV', arm, A, shaft, S, arm, A', bevel geared wheels, BV' and BV'' arm, A'', shaft, S', pinion, PN, arm, A''', racks, R and R', all

constructed, arranged, and operating in the manner as above set forth and described.
2d, Racks, Rand R', with their arms Dand D', said racks arranged with or without bearings, and operating in the manner and for the purpose above set

forth.

3d. Bumper, H, with its toggle joint and spring S P. arranged and operating on arms, D and D', in the manner as above set forth and described. 3d. Bumper, H, with its torgic joins and year and described.

4th, A railway signal composed of the above set forth and described.

4th, A railway signal composed of the above set forth and shown.

79,164.—MAKING CHEESE-HOOP.—H. M. Viets, Carlisle, Ohio.

1 claim the boop, C. in combination with the hoop, A B, in the manner and for the purpose specified.

70,165.

ANDER FOR VEHICLES.—S. D. Wackman, Auburn,

I claim 1st, A trough shaped axle for vehicles substantially as set forth.
2d. The combination substantially as setforth, with a trough shaped axle,

79,166.—CORN-HUSKER, STRAW AND STALK CUTTER.—R. Warriner and J. H. Baker, Saratoga Springs N. Y. We claim 1st, The arrangement of the brushes, E. E. upon the sides of the leather covered rollers, D. D., in the manner and operating as and for the pur-

leather covered rollers, D.D. in the manner and operating as and for the purposes set forth.

24. The brushes, T.T. in the plate, m, on the under side of the lid, S, to operate upon and with the rollers, D.D. as specified.

79 167.—LUBRICATOR.—Gardner Watres, Cincinnati, Ohio.

Antedated, March 31, 1888.
I claim an automatic libricator, the glass of which is provided with a soft metal socket or guard castnotonly around but also within the lower portion of said but bor reservoir, so that the metal shall form a button against the enlarged or bulging part of the reservoir, substantially as and for the purposes herein set forth.

orein set forth.
—Shaft Coupling.—Seth Wheeler, Albany N. Y.

79,168.—Shaft Coupling.—Seth Wheeler, Albany N. Y. I claim ist, A ball and socket, or other analogous closed coupling, having anti-friction pin, stud, or roller applied to it substantially as and for the purpose described.
2d, Constructing the socket, C, with recesses in or through it, adapted for receiving a pin, a, which is applied to an enlargement, D, of a spherical or other shape, substantially as described.
3d, Fitting the driving pin, a, into a fiaring bole, b, made through an enlargement, which works in a socket, C, and covered by means of caps, c c, or been equivalents, substantially as and for the purpose described.
4th, An articulating coupling, with a pin, stud, or roller, which is free to roll on its impinging surfaces, and also to vibrate substantially as described.
5th The combination of the flaring or oblong pin hole or slot in the ball of the eoupling with the oblong slots of the socket, substantially as described.
79,169—STREET LAMP.—W m. O. Wheeler Deposit, N. Y. I claim is A tube of a street lamp of the described construction, when provided with a diaphragm and openings, and having communication effected or cut off by means of an enclosing sieeve, all as described, and for the purpose set forth.

and or cut on by means of an excessing state of the yalves, constructed and operated as described and for the purpose set forth.

3d A street lamp, so constructed that the gas may be turned on or off by moving the valve which closes the orifices of the lamp, substantially for the purpose set forth. 79,170.—Harvester Rake.--Wm. N. Whiteley, Springfield,

Obio.

Claim a guide-frame B, constructed with an orifice H, over which the switch, D orits equivalent, must move in opening and closing substantially as and for the purpose set forth

79,171.—HAVRESTER DRIVING WHEEL.—Wm. N. Whiteley, and Thomas Harding, Springfield, Obio.

We claim the eccentric hollow axle, C, provided with the stud I, or its equivalent and the notched flance, E in connection with a pin, H, socketed coupling arm, F, and bolt, D, substantially as and for the purpose set forth.

78,172.—STEAM GENERATOR.—Robert Wilde, Philadelphia, Pa.

78,172.—STEAM GENERATOR.—Robert Wilde, Philadelphia, Pa.

1 claim ist, In a steam boiler or generator, the perforated dividing partition plates, a" or b", substantially as and for the purpose described.
2d, in combination with a steam boiler or generator, the verticle transverse partition plates, a" or b", the same being constructed and arranged substantially as and for the purpose described.

3d The verticle overflow pipes G, constructed and arranged substantially as and for the purpose described.

4th, in combination with two or more steam boilers or generators A and B, arranged with ene directly above another, and connected together by means of the open verticle overflow pipes, G G as described, the employment of the float, I, in the lower boiler, and the feeding cyl-nder, C with its case, D, on the upper boiler, the same being connected together by he lever, K, pulleys, H H, and any sutable moving "band" and the whole being arranged to operate together, substantially as and for the purpose described.

79,173.—Horse Hay Fohk—Henderson Willard, Grand Rapids, Mich.

Rapids. Mich.
I claim the arrangement of the horizontal bars. A and C, and tines BB, with
the worn screw, D levers, g and h, and cords, f and j, when used as and for
the purpose herein fully set forth.

the purpose herein fully set forth.

79,174.— RECUMBEAT CHAIR.— Torwald Winter, Boston, Mass.

1 claim the combination of the base and seat frame, a upping back, b, joint eatems, c, levers, d, leg rest, i, spring rack bar, n, and its foot piece, e, when all are arranged to operate together, substantially as shown and described.

scribed.

Also in combination with the above, the toot-piece, k, arranged to swing down against or up from the arms, l, substantially as shown and described.

79.175.—COMBINED SQUARE AND MITER.—W. S. Winterbot-

79.175.—COMBINED SQUARE AND MITER.—W. S. Winterbottom, Philadelphia, Pa.

I claim the angular continuation, b. of the blade of a square, beyond the rear edge of the scockfor the purpose specified.

79.176.—MACHINE FOR MAKING WIRE SCREENS, ETC.—Sanford Adams, Boston, Mass.

I claim 1st, The revolving crimper, G, provided with teeth, n n n, either with or without spurs, x x, when arranged and operated substantially as described, and for the purpose set forth.

2d, The jaws, B and C, when arranged to hold the parallel wires into the guides, F F, substantially as described, and for the guides, F F, together by the connecting pieces, I I, to keep them in position substantially as and for the purpose set forth.

79.177.—MANUFACTURE OF LEATHER.—Wm. Adamson, Philadelphia, Pa. adelphia,Pa.
I claim the treatment of hides or skins with the material and in the man-ier described for the purpose specified.

-Preparation of Glue Stock.-Wm. Adamson,

79,178.—I'REPARATION OF SHEET PHISHED THE PRICE OF THE PR Delta, Ohio.
I claim 1st, The combination and arrangement of the acadant-wheel F,

I claim 1st, The combination and arrangement of the bondant-wheel r, with the tension rods, H, bars, G, hook bars, N, spring, d, srew, p, and cy.n. drical boxes, substantially as described for the purpose specified. 2d, The slotted vprating arm, W.in the shear case S, when operated by the cord, g g' and wheel, Y as herein described for the purpose specified. 3d, The universal swivel joint, E. constructed as described, of the hinged joint ring a, spiral spring, d, enercling the central tube, the bar, n, the sl.ds swivel, C, as herein set forth.

4th, The construction of the swivelholders or guides, D, asherein described for the purpose specified.

4th, The construction of the swivemonumers of guides, D., asher of described for the purpose specified.

5th, The combination of the universal thimble joints, E. tension rods, H., bars, G., pulleys, B. F. and shear case, S, substantially as described, for the purpose specified.

6th. The portable sheep shearing device operated by means of the treadle, the pivoted to the rod, I, of the driving mechanism as herein described, for the purpose specified.

the purpose specified. 79,180.—Securing Buckles and Rings to Harness.—R. B. Anderson, Oneida, Ill.
I claim securing buckles or rings to leather straps by means of a tapering metallic box B, secured by screws, dd, whereby the end of strap is enclosed

79,181—Instrument for Testing Shoe Soles.—F. T. An-

drews, Charlottesville, Va.

1 claim the instrument for testing boots and shoes, constructed substantially as herein shown and described, as a new article of manufacture.

79,182.—STEAM SAFETY-VALVE—E. H. Ashcroft, Lynn, Mass. I claim 1st, The combination of the diaphragm, C, valve, E, valve, g, ten, d, with the base, b, and spring, t, substantially as herein set forth.

2d. The construction of the valves, g and e, and the arrangement of the recesses, n and m, ledges k l, valve, e, opening, f spring, l, and diaphragm, c substantially as herein set forth.

c substantially as herein sections.
79,183.—PROPELLER.—Robert Atkin, Brooklyn, N. Y.
I claim the application of the helical propellers, 8 B, to the sides of a set, by the means of a hinged frame, C. C. in combination with a suit son, or the means of a ninged frame, U. In combination with a suitable mechanism for actuating said propellers, the latter having no connection with the vessel below the water line, and the entire apparatus being made capable of being elevated and turned upagainst the side of the vessel, and out of water when not required for use, substantially as and for the purpose specified.

79.184.—Swage for Circular Saws.—John G. Baker (assignor to Henry Disston), Philadelphia, Pa,
I cl-im, 1st, A bar, A, anapted at its lower end to or arranged to embrace
the rollar, washer, or spindle of a circular saw, in combination with the
swage, P, hung loosely to the said bar, but having its movement on the same
jimited, all superantially as and for the purpose herein set forth.
2d. In combination with the said bar, a plate, n, for fitting against the face
of the saw blade, as described.

79,185.—Saw.—John Gulick Baker (assignor to himself and

Henry Dission), Philadelpbia, Pa.

I claim a bard metal block, adap ed to an opening formed in the blade of a saw, and having projections which fit notches in the detachable tooth, in combination with a soft metal packing, fitting the said opening at one side of the block, and maintain ing the latter in its place, all being constructed and operating in the manner substantially as described. 79,183.—Carriage Brake.—William Ballard, Lapeer, N. Y.

I claim, 1st, The bent hound bolt orcrank as described, and fastened to hounds and tongues by means of iron straps, j) and o, also the said manner of fasiening, as here in described, and for the purposes set forth.

2d, The rod, f, connected with slides, kk (slots or slides), and with rod, I, and brake, m, in four parts. m, t, p, and r, with slides, slots, and spiral coil springs, in combination with crank-hound bolt, g, and other parts herein mentioned and claimed, substantially in the manner and for the purposes herein described and set forth.

79,187. - LAMP EXTINGUISHER. - Stephen J. Batchelder Manchester, N. H.
I claim the flaged cap or extinguisher, A, so constructed as to cover the vick and vapor tubes, f and G, in combination with the flat spring or band,

29

C. embracing the wick tube, F, and operating in connection with the spindle Frank, B.
79,188.—MANGLE.—Joseph Beaumont, Onamor, Cloth, e,
I claim the rollers, a c c', in combination with the enveloping cloth, e,
table, A, adjustable orackets, d d', and springs, c"c", as and for the purpose
described.

MACHINE.—Sanford Beckwith, Oshkosh

Wis.
I claim ist, The screw cylinder, d, cup, m, and adjustable cap, e, arranged relatively one to the other for joint action, substantially as and for the pur The screw cylinder, d, in combination with cup, m, as herein described by nurposes set forth.

or the purposes set forth.

3d. The semi-elliptical tube or scatterer, k1, as and for the purposes set forth.

4d. The slots, n 0, as a means of adjusting the part, 1, relative to the part, k, as and for the purposes set forth.

79,190.—BASIN FACCET.—John Benson, Yonkers, N, Y.

1 claim, 1st, The combination of the coupling tube, A, having nuts, b, above and below the slab, with the stock, C, of the cock, and locking nut, D, all arranged and operating substantially as shown and described.

2d. In combination with the above, the cap or stell, E, attached to the stock, C, and enclosing the coupling joints, substantially as shown and described.

scribed.
79,191.—SHEARS.—Georg Bergner, Washington, Mo.
I claim the slotted bolt, b. with its cap, e, spring, o, shoulder, n, all in combination, when arranged in relation to each other and the blades of the shears, substantially as and for the purpose specified. bstantially as and for the purpose specified.

BRICK DRYING KILN.—E. W. Bingham, Williams

port, Pa.

I claim the combination and arrangement of the drying kiln, A, with its a partments, arched entrinces, a a, gates, b b, side flues, d d, and the valves, e e, and the furnaces. B B, with flues, C C, and valves, c c, substantially as and for the purposes herein set forth.

and for the purposes herein set forth.

79.193.—SHEARS.—Charles Bishop. Trumbull. Conn.

I claim shears, the joint of which is constructed in the manner described, that is to say, the one blade constructed with a circular flange, d, the invertadiameter of which is less than the rivet or screw, the other blade with recess corresponding to the said flange, d, and so that a portion of the recessed blade will enter, fill, and fit the spacewithin the circular flange on the other blade, and through the center of which a screw or rivet, i, is placed, to secure the two blades together, substantially in the manner and for the purpose set forth.

se set forth. ,194.—CARD OR TICKET CASE.—Charles C. Blakemore, W shington Court House, assignor to George C. Robiuson and Henry A. Manning, Cincinnati, Ohio.

manning, cincinnati, Ohio.

I claim the case, A, hinged open face cover, C, rectangular spring, D, and elastic lips, B, combined, arranged, and operating in the manner and for the purpose specified. -GRATE.—Edmond Bosdevex, Philadelphia, Pa.

folam the combination of a permanent grate, B, and a grate, D, hung to the rear side of a fire place, and capable of such adjustment that its from edge may be brought to any desired position on the grate, B, for the purpose described. edge may be brought to any described.

79,196.—PAINT COMPOUND.—H. W. Bradley, Binghampton

I claim a paint, produced by combining the oxide of lead or zinc, or other pigment or pigments, with the materials hereinbefore named, mixed and treated in or about the proportions and substantially in the manner de scribed, for the purpose specified.

-Сники.—Joseph W. Bradley and George H. Jordan

Rocheport, Mo.
We claim, 1st, The perforated agitator, D, when provided with knives, x, and operated as and for the purpose specified.
2d, The strainer, E, whon used in combination with a churn, and constructed as and for the purpose herein set torth.
79,198.—EXPANDING MANDREL.—John Brewer, Philadelphia,

79,198.—EXPANDING MANDREL.—John Drewer, I miscrepass, Pa.
I claim the cutter head, E. in combination with the screw rod, D, cap, C, swivel, B, slotted stock, A, and the rod, G, as shown.
79,199.—SEWER.—Jesse Brow 1, San Francisco, Cal.
I claim the protective cap, when constructed and arranged as described, so as to secure the upper and lower drains of privies, as set forth.
79,200.—HYDRANT.—Thomas Brown, Allegheny City, Pa.
I claim, 1st, The spour, D, and pipe, E, with the taclibed slot, B, and movable cap, C, combined, arranged, and operating substantially as occurbed.
2d. the hollow valve, H, and hollowed screwed stem, G, with the nut, L, pipe, E, at.d spour, D, combined, arranged, and operating as and for the purpose set forth.
79,201.—GATE.—John A. Burchard and Richard Tattershall,

79.201.—Gate.—John A. Burchard and Richard Tattershall,

79,201.—GATE.—John A. Burchard and Richard Tattershall,
B. loir, Wis. Antedated February 12, 1868.
We claim, ist. Broadly the employment of the double pulley, D.d., pawl, R., ratchet, e, weight, G. and cords, h.h., when constructed, arranged, and operated for the purpose of operatins a gate or gates.
2d. Broadly the circular inclined plane, J., when constructed and arranged substantially as herein set forth and described, for the purpose specified.
3d, The latches, n.n., and stope, p. in combination with the inclined planes J. J., shaft, C. C., cranks, c.c., pulley, D.d., cords, h.h., weight, G. gate standards, B.B. rods, b.b'. and rphiers, I. I. when the whole is constructed and arranged to operate substantially as herein described.
79,202.—K. NITTING MACHINE.—W. W. Burson and John Nalson Rockford III. Antested June 12, 1982.

to operate suctaining as bersin described.

79,202.—KNITTING MACHINE.—W. W. Burson and John Nolson, Rockford, Ill. Antedated June 12, 1883.

We claim, 1st. The combination and arrangement, with the supporting frames, A D, of the gate, E, vibrating yarn carrier. H, and plates, B B, provided withloop carriers, e e e, and feed rack, N, the whole operating as and for the purpose set forth.

2d. The two parallel plates, B B, carrying the loop carriers, e e e, con structed and arranged to move in the groove, C, substantially as described.

3d. The combination of yarn carrier, H, with looper bearer, K, groove, n, and pin, m, constructed and operating substantially as set forth.

4 h, The combination of yarn carrier, H, constructed in two parts as described, with seleasing lever, P, loopers, a a', and loop hooks, e e, arranged to knit irregular work, as set forth.

5th, The reversing crank, L, in combination with the looper bearer, K, operating substantially as asserthed.

6th, The combination of the stop blocks, t'r, reversing rods, o, o, and loop hooks, e e, e, when constructed and operating substantially as described.

7th. The combination and arrangement of reversing rods, o, o, cum, s s', and rip plate, T, when constructed and operating substantially as described.

8th, The combination and arrangement of spring, Y, feed bar, M, and crank L, operaring substantially as estforth.

10th, The combination and arrangement of releasing lever, P, looper bearer, K, and crank L, operaring substantially as estforth.

er, K. and crank, L, when constructed and operating substantially as described.

11th, Constructing and arranging a knitting mechanism, substantially such as herein described, so that the redproacting motion of the gate, E, shall impart the proper motions to the different parts, substantially as set forth.

79,203.—EDGE PLANE FOR BOOTS, ETC.—F. Buxton and Geo.

Crosby, Lake Village, N.H.
We claim the adjutable guard plate, E., constructed substantially in the manner and for the purpose described and set forth.
Also, constructing edge planes with a bolster or part, L, substantially as described and for the purpose setforth.
79,204.—OPERATING SLIDE VALVES.—Isaac Church, Jr., Nor-

walk, Conn.
I claim the arrangement of the puppet valves, I I', with relation to main alve, D, steam passage, H, and piston, B.in such manner as to dispense with the pupper connection therewith, substantially as shown and described. all outer connection therewith, substantially as shown and described. 79,205.—WHIFFLE TREE PLATE.—James B. Clark, Plants

ville, Conn.
I claim a whifte tree plate, with its shaft, B, tenon, C, bearings, E and F, and third plate, G, all constructed and operating substantially as described.
79,206.—CAR BRAKE—Lyman Clark, Pine Island, Minn.
I claim the friction wheels or rollers, C, and shaft, F, combined with the wheels of a railroad car, and with the orakes controlling the same, when operated by a chain or cord winding upon a horizontal rod or shaft beneat the car, substantially in the menner and for the purpose herein setforth.

79,207 — THREAD GUIDING PLATE FOR FILLING TATTING SHUTTLES,—AbramClow, Port Byron, N. Y.
I claim, as an article of manufacture, the guide plate, A, constructed and slotted as herein shown and described, and for the purpose set forth.
79,208.—Toy Head for Canes.—Augustus Cooke, Orange,

N.J. I claim, 1st, Forming the top of a caue in the shape of an animal or bird's lead, the features of which can be moved by pressing upon knobs in the cane. 2d. The combination of the wires, b g and d, with the eyeball plate, a'tongue, e, lowerjaw, f, and springs, a',1', and c', when arranged and operat

ing substantially as described.
79,209.—Instrument for Adding Figures.—Charles Cor

19,009.—INSTRUMENT TO BE STORM TO STORM THE ST

79.210.—CLASP FOR HOOP SKIRTS.—Abel J. Cross, Green

10.—ULAST FOR THOSE TYPE TO THE STATE OF THE

79,211.—FLOUR PACKER.—Christian Custer (assignor to himself and Charles K. Bullock), Philadelphia, Pa.

I claim, 1st, The combination in a flour packing machine of a stationary cylinder, G, with a sliding cylinder, H, within which operate the devices for propelling and packing the flour.

2d, The within described propelling device consisting of two propellers, f and f, attached to a shaft, I, one on each side of a cross bar, e', having inclined arms, the whole being combined with the sliding cylinder, H, substantially as specified.

ly as specified.

i, The silding cylinder, H, and strap bar, N, so connected that the said will be operated by the movement of the cylinder, substantially as de-

79,212.—STOVE DRUM.—D. W. Cutting, Cambridge, Vt. I claim the arrangement of the drum, C, over the fire box or a cooking or box stove, when said drum is provided with an opening near each side, from which project two pipes, B B, that he parallel to each other in the stove, and are provided with elbows that passthrough openings in the side of the stove, opposite to each other, for receiving and transmitting air, as and for the purpose set forth.

79,213.—DEVICE FOR HOLDING ROTARY CUTTERS WHILE BRING GROUND.—Henry Disston, Philadelphia, Pa.

I claim the frame, A, arranged for the reception of the spindle of a rotary cutter, as set forth, in combination of the rear rollers, f, and the ventically adjustable roller, c, substantially as and for the purpose specified.

79,214.—MAIL BAG.—D. Frank Dodge, Lowville, N. Y.
I claim the construction of the mouth frame, AB, as herein constructed and set forth.

79,215.—Steam Generator.—Edward Dunscomb, Boston, Mass. Antedated May 7, 1868.

Mass. Antedated May 7, 1868.
I claim a steam generator constructed and arranged as shown and decribed.

scribed. 79,216.—CORK SCREW.—John E. Earle, New Haven, Conn. I claim the combination of the handles, B and D. with the cork screw, E, pivoted togethers o as to operate in the manner shown and described, and with or without the cutters, A and C. 79,217.—PUMP.—Chas. F. Eastleck, Mantua, N. J.

I claim the pump baying cylinder, A, plunger, B, piston, C, pipe, D, platform, E, lever, G, trough, K, constructed, combined, and arranged substantially as and for the purposes specified.

79,218.—SMUT MILL.—John T. Ewan and James R. Glenn,

10,210.—SMUT MILL.—JOHN I. L. WAN AND JAMES K. Glenn, Hillsboro, Ill.
We claim the arrangement upon the frame, A. in the manner described, of the suction legs, K.K., chambers, M.M., check boards, L.L., arr truck, D., and its valves, R.R., dust chamber, O, and spouts, S.S., with the cylinder, F. its wire brushes, J. staves, I, plates, G.H., fan, P, and sbaft, C., with the rivarious parts, all constructed and operating substantially as and for the purposes set forth.

79,219.—Supplemental Jaw for Wrenches—Robt.Faries, Indianapolis, Ind.
I claim the applicable wrench jaw, when made substantially as described, san article of manufacture.

-Lining Flexible and other Hose and Tubes

79,220.—LINING FLEXIBLE AND OTHER HOSE AND TUBES WITH INDIA RUBBER, ETC.—James E. Forsyth, Boston, Mass., assignor to himself and John H. Cheever, New York.

I claim, 1st, Water-proof hose or tubing composed of a tube of woven fabric or other material, and a vulcanized india-rubber lining, the two being held and cemented together by interposed non-vulcanizable gum, as and for the purposes herem set forth.

2d, The method of lining hose, or other tubular articles, by inserting to the article to be lined the vulcanized rubber, or equivalent lining, with its coating or exterior layer of unvulcanizable gum, and then expanding said fining, and forcing the said gum or cementing material into the meshes or pores of the article to be lined, by means of steam, hot water, or hot air introduced within the lining, as set forth.

3d, A lining for hose and other tubular articles, composed of a tube of vulcanizadrub ber, with an exterior coating or layer of unvulcanizable gum or cement, with or without one or more piess of cloth or other fabric, combined and united with the lining as herein set forth.

The method herein described of coating the hose or tubing with vulcanized rubber, both internally and externally, as and for the purposes set forth.

79,221.—LAMP BURNER.—Edward A. Galbraith (assignor to

79,221.—LAMP BURNER.—Edward A. Galbraith (assignor to himself and Paul P. Todd), Boston, Mass.

I claim, 1st, The combination with the conduit for supplying air to the flame, of a vapor conducting pipe, leading from the fluid reservoir of the lamp and communicating with the said air conduit, substantially as and for the purposes herein shown and set forth.

2d. A lamp burner in which the divided wick tube with its double wick, the air supplying pipe or co. duit, and the vapor conduit are combined and arranged for joint operation in the manner herein shown and described.

79,222.—LETTER BOX.—Chas. P. Gorely, Boston, Mass.

I claim, 1st, The combination and arrangement of the, 8. bars, D.E. F., wire or chain, G. and spring, S. all constructed and operating substantially in the manner and for the purpose specified.

2d, The latrotuction of the chains, H and G. into the length of, the bell wires, for the purpose of allowing either of two modes specified to be used in ringing the bell, without interfering with the other, as set forth.

79,223.—HAMES FASTENER.—Jacob Harding (assignor to Henry I. Allen & Co.), Schoolcraft, Mich.

I claim, 1st, The straps, A and B. connected by the lever, C, as and for the purposes set forth.

2d, The projecting feather, E, and groove, 3, when operated in connection with lever arm, C, and strap, B, substanually as described and for the purposes specified.

79,224.—HAMES COUPLING.—Geo. W. Heckart (assignor to

poses specined.
79,224.—HAMES COUPLING.—Geo. W. Heckart (assignor to himself and Christian Kramer), Columbiana, Ohio.
1 claim a hames coupling constructed, arranged, and operating substantially as nerein described and for the purpose set forth.

itally as nerein described and for the purpose set forth.

79.225.—STEAM GENERATOR.—H. Heine, New York city.

I claim, 1st, A steam generator composed of an internal main or central part, M, and of an onter annular water space, G, said internal part being provided with a water space, D, and fire flues, a, and communicating with the outer annular water space, or pipes, e and q, all as shown and described.

2d, The steam dome, E, rising through the center of the bonnet, I. which covers up the annular water space, G, said water space steam dome being connected by pipes, G, substantially as and for the purpose steforth.

3d, The water pipes, H, situated in the combustion chamber, F, between the central part and the annular water space, substantially as and for the purpose set forth.

4th. The siphons, b, connecting the pipes, H, and the water legs, C, substantially as and for the purpose described.

79.226—Hort AIR Registers—Wm. Highton Malden as

stantially as and for the purpose described.

79,226—HOT AIR REGISTER.—Wm. Highton, Malden, assignor to Moses Pond & Co., Boston, Mass.

I claim the arrangement and combination of the wheel with the grate, the sliders, and the series of shutters applied to the frame, A, as set forth.

Also the combination of the frame, A, and the ribs, F, with their recesses, rr, as and for the purpose specified. for the purpose specified. -Fastening Check Hooks and Terrets.—A. L.

Hill, Decatur, Ill.
I claim providing theterrets, B B, and check hook, A, with loops, b h, as -Horse Нач Fork—Alfred Houghton, Seville,Ohio. 1 claim the checks, E.F., springs, G. in combination with the slide, C., in the manner as and for the purpose specified.
79,229.— Manufacture of Gunfowder.—Wm.H. Jackson,

79,229.—MANUFAUTURE OF GUNTOWNERS.

Salem, Mass.
I claim the manufacture of gunpowder by mixing a solution of nitrate of potash, er a known equivalent thereof, with a soluble vegetable extract, such as extract of logwood, or with other soluble organic matter, and by subsequently evaporating to dryness, with or without the addition of sulpbur or of pulverized charcoa, substantially as herein above described.

79,230.—Gas Heater.—William Jones, Chelsea, Mass.

79,230.—GAS HEATER.—William Jones, Chelsea, Mass.
I cisim, for the purpose of mixing air and gas to be burned, a plug cock, having a long, open, chambered plug, with inlets, k. and outler. J, arranged to operate substantially as described.
Also, in connection with a burner arranged within a conflued space, provision substantially as shown and described, for supplying fresh, unvitiated atmospheric air, to be mingled with the gas passing to the flame, as set forth.
79,231.—PESSARY.—Benjamin Joseph (assignor to himself and Wm. McNiece), Philadelphia, Pa.
I claim, ist, The hollow vertical shaft, c, in combination with the body, A, as and for the above described purpose.
2d. The combination of the base, B, shaft, c, and universal joint, d, as and for the above described purpose.
79,232.—Ticket Punch.—R. J. Kellett, San Francisco, Cal.
I claim a small auxiliary punch so arranged as to punch a hole in the con-

I claim a small auxiliary punct so arranged as to punch a hole in the control or portion so removed, at the same operation which removes or punc the coupon or portion of the ticket, thus providing a convenient means stringing sail coupons or portions for preservation and reference, as

scribed.
79,233.—BILLIARD REGISTER.—Isaac Kling, Seymour, Ind.
I claim, 1st, Operating the index rod, which shows the number of games
played, by the movement of the points to mark the games, as set forth.
2d, The combination of the slotted sildes, B and C, noors, I I, neex rod, D, and spring, c, with the bar, E, and wire, El, when arranged and operating suos antially as described.

3d, The pivoted places, d2, and spring, d3, in combination with the notches, H, for preventing the index rod from being raised from the outside of the

case,
4th The spring, b2, and inclined plane, B3, for operating the connection and
disconnection of the slider and bar, E. as set forth.
5th, The checking points, e2, provided with springs, e4, and latches, e3, in
combination with the notch, e6, and depression, 13, for preventing the points
from being moved backward and re-marked without counting a game, as set
forth.

79.234.—Zincing Iron.—Fred'k A. Kraft, l'hiladelphia, Pa.

79,235.—Combined Cultivator and Planter.—Charles L.

79,236.—Combined Cultivator and Planter.—Charles L.

Lee, Fitchville, Ohio.
claim, 1st, The adjustable frame, A, platform, K, lever, B', axletree, B,
wheels, D, all constructed and arranged to operate in the manner subntially as set forth.

stantially as set forth.

2d, The slide boxes, J, groove, a, slide, G, and lever, H, as constructed and arranged to operate in the manner and for the purpose specified.

79,287.—MANUFACTURING BOLSTER PLATES.—Wm. J. Lewis

79,387.—MANUFACTURING BOLSTER PLATES.—WM. J. LeWis and Henry W. Oliver, Jr., Pittsburg, Pa. We claim a new article of manufacture, viz., iron bars rolled to the shape of a connected scree of blanks for bolster plates, substantially as herein described and for the purpose ret forth.

79,238.—AXLE BOX.—I. Stone Lister, Philadelphia, Pa. Iclaim, 1st, A bearing arranged withinan axle box above a journal, and having a chamber and channels leading from the same, through which oll may flow by its own gravity to the journal, all substantially as and for the purpose described.

osedescribed.
The combination of the said chambered bearing with the oil reser-3d, The plug. I, with its air passages, p and p', and regulating valve, q, in combination with the reservoir, G.

79,239.—Belt Coupling.—T. S. Livermore, Leicester, Mass. I claim the above described coupling, consisting of the screw, with its conical head, in combin tion with a nut of similar form, capable of being arawn into the belt, when constructed and operating in the manner and for the purposes above set forth and described.

79,240.—Water-proof Leather Cement.—Wm. S. Loughbrough, Rochester, N. Y.
I claim the compound composed of the ingredients above setforth.

79,213.—DEVICE FOR HOLDING ROTARY CUTTERS WHILE 79,241.—FEVER AND AGUE MEDICINE.—John Mabrey, Jeffer-

13,211.—FEVER AND AGUE MEDICINE.—John Madrey, Jenerson City, Mo.
I claim a remedy for the fever and ague and other bilious diseases, comounded of the ingrecients, in the proportions, and in the manner herein
beeified, substantially as described.
79,242.—UARPET STRETCHER AND TACK HOLDER.—R. M.

79,242.—UARPET STRETCHER AND TACK HOLDER.—R. M. Mansur. Augusta, Me. I claim the construction of the three pronged plate, with the elastic rubber rings, F. F., as a tool for the purposes set forth and herein described. 79,243.—BEEHVE.—Jacob McDonald, Buffalo, Ohio. I claim the guiding board, A, with sidestrips, g., the two sections, C. C., and cross board, i, for the use and purpose as specified and b-rein setforth. 79,244.—CHURN.—James H. Monce, Hopkinsville, Ohio. I claim, 1st, The arrangement and combination of the adjustable arm, K, pirman, L., and reversible balance wheel, M, a sherein described and for the purposes set forth.

2d, The combination of the pitman, L. and reversible wheal. M when A.

purposes set forth.

2d. The combination of the pitman, L, and reversible wheel, M, when constructed and operating as herein described, for the purposes set forth.

79,245.—CAR COUPLING.—Ben jamin Monroe (assignor to himself, Wm. E. Chadwick, and Nathan N. Cole), Bristol, R. I. I claim, ist, The combination of the draw pin, B, constructed as described, with the slotted draw head, H, having an inclinedor funnel-shaped or frice, as

described combination of the head, H, pin, B, and link, L, all constructed and operating as and for the purpose specified.

79,246.—SHEARS SHARPENER.—Melvin M. Morse and M. V.

79.246.—SHEARS SHARPENER.—Melvin M. Morse and M. V. Collins, Buffelo, N.Y. Weldim, 1st, The adjustable gage plate, D. provided with stops, e.e., arranged and operating with the grinong wheel, B, substantially as set forth. 2d, In combination therewith, the self-adjusting pressure roller, F, substantially in the manner and tor the purpose set forth. 3d, The spring, b, arranged with a pressure roller, F, and gage stops, e, substantially as and for the purpose specified. 79,247.—BRICK DRYER.—John M. Moyer, Pittsburg, Pa. Antedated Dec. 23, 1867.

1 claim the turn table, with car tracks, with heater beneath, in combination with the grooved pulley wheels, arranged and operating substantially as and for the purpose herein described.

The car, with upright center plate, and binged folding leaves, constructed and operating in manner and form as described, to and for the purpose in tended.
79.248.—Sash Fastener.—Henry North, New Britain Conn.

79,248.—Sash Fastener.—Henry North, New Britain, Conn.

79,248.—Sash Fastener.—Henry North, New Britain, Conn. I claim, 1st, the combination of the bolt, D, pivoted at f, with the shoulder k, and the leaf or bit, L for the purpose of locking the sash down when the lock is placed in the casing, or locking the sash up when the lock is placed in the sash, sunstantially as herein described.

2d. The soring, G, operating in combination with the bolt, D, to press the sash laterally against the casing and prevent rattling when the bolt is locked into the recess, L, substantially as described.

3d, So constructing and arranging the several parts of the lock described, that the bolt, D, which locks into the recess, L, to secure the sash in the manner described when closed, shall turn upward when the sash is opened, and act as a pawl or stop, under the influence the spring. E, to hold the sash in any leaf or bit, i, which locks it down, substantially as herein specified.

79.249.—MORTISHON MACHINE.—Gerrif V Orton and John

leaf or bit, i, which locks it down, substantially as herein specified.

79,249.—MORTISING MACHINE.—Gerrit V. Orton and John Richards, Cincinnai, Ohio.

We claim, 1st, The tractional device, p and q, for controlling the action of the treadle and chiesl bar, substantially as herein described.

2d, Adjusti g the table support, a', laterally upon the stud, b', in the manner and for the purposes shown 6d, The bent stops, o'n', when arranged to swing and adjust to different points on the stuff, in the manner herein set forth and shown.

4th, The adjustable nut piece, h', arranged with a clamping screw, to act on stuff of different thickness, in the manner and for the object as specified. 5th, The rotating clamp piece, i, for adjusting and bolding the table support, a, in different positions, '8 shown and for the objects described.

79,250.—Cheebe Curd Rake.—Edwin A. Palmer, Clayville, N.Y. Antedated June 12, 1868.

79.250.—CHEESE CURD RAKE.—Edwin A. Palmer, Clayville, N. Y. Antedated June 12, 1868.
I claim the upper head, C, and the braces, D. D, or their equivalent, for the purpose therein described and set forth.
79.251.—WAGON BOX.—Hiram Palker, Salem, assignor to H. W. Persing. Marion county, Ill.
I claim the combination and arrangement of the eccentric, a, working on the studs, f, the rods, b, b, working in the staples, d d, the pawl, y, attached to the bandle of the eccentric, a. so as to work in the ratchet, g, substantially in the manner shown and described, and for the purposes above set f. rch.
79.252.—RAILWAY TRUCK.—Wm. P. Parrott (assignor to N. F. Bryant), Boston, Mass.
I claim the combination and arrangement of a cartruck with laterally moving wheels, as described.
79.253.—Anderson and Fireplace.—Frederic Passy. Paris.

moving wheels, as described.
79.253.—Andiron and Fireplace.—Frederic Passy, Paris.

France. Iclaim, 1st, An andiron having channels or passages arranged substantially as described, so that a current of air from the lower portion of the apartment in which the andiron is placed shall pass into and through the andiron, and be dischareed into the apartment in a beated state, as specified.

3d, The combination of the above and a water receptacle, arranged upon the upper end of the andiron, as and for the purpose described.

79,254.—CAR COUPLING.—Abram Perrin, Cleveland, Ohio, assignor to himself, Chas. L. Rowand, Geo. S. Selden, and Marmacuke Moore, Philadelphia, Pa.

1 claim the construction of the draw head, A, with its open side, and pin, h, "ad having stopps, cit 2 and c3, of the torm shown, in combination with the link or connecting irons, D and H, the former being provided with a heat, cil, and lug, 2, and weight, G, all substantially as and for the purpose set forth. France.

79,255.—Machine for Forging Nuts.—Amzi P. Plant and 79,255.—MACHINE FOR FORGING NUTS.—Amzi P. Plant and Amos Shepard, Plantsville, Coun.
We clsim, 1st, The right and left hand conveyor.u, when so constructed as to convey a nut blank from the cut-off mechanism, whether moving from the right or left, and slotted plate, A, in combination with the cut-off device and a forging mechanism on the right and lett of it, substantially as described.

2d, The swinging conveyors, ul u2 u3, in combination with the forging, punching, and fluishing mechanism, all constructed, arranged, and operating substantially as described.

79,256.—SaP SPILE.—Charles C. Post, Hinesburg, Vt.
I claim the sap solle constructed with the longitudinal fins. B. whereby it

I claim the sap spile constructed with the longitudinal fins, B, whereby it may be held or retained in the tap or hole in the tree without materially interiering with the flow of the sap, substantially as herein set forth.

79,257.—CHERRY STONER.—Albert Rakestraw, Peoria, III.
I claim a cherry stoner having sliding beam, D, openings, B C E H and K, fork, O, and block, Q, constructed, arranged, and operating substantially as berein selected.

Telaim a cuerty successful arranged, and operating substantially as herein specified.

79.258.—TUBULAR AXLE.—T. C. Rice, Worcester, Mass. Antedated June 9, 1868, I claim the square shouldered offsets, U.C., on the axle, A. for securing it to the wooden bed, B, with the clips, a a, which fit over such shoulder, as herein shown and described.

79.259.—COAT RACK.—Jesse B. Rumsey, Sturgis, Mich.

I claim 1st, The form or construction of the butterfly-wing frames, A.A., with their series of overbanging coat hooks, a a a a, as arranged and combined with the socket chairs, B.B. substantially as accorded for the porpose specified.

2d, The combination of the connecting bar, D, and the chairs, B.B., with one or more hinged frames, having each a series of overbanging coat or one or more hinged frames, having each a series of overbanging coat or one or more hinged frames, having each a series of overhanging coat or clothes hooks, to be placed and secured in a nydesired position, substantially as and for the purposes herein set forth. 79,260. -- APPARATUS FOR DISTILLING. -- D. Saville, Paris,

79,260.—APPARATUS FOR DISTILLING.—D. Savine, rafis, France.
I daim, ist, The combination, with the column. B, of a casing, A, divided into two compartments, A'B', the lower containing a heating plpe, m, and the upper a perforated plpe, a, or its equivalent, substantially as and for the purpose described.
2d, Graduating the size of the openings in the perforated plates of the column, and the length of the tubes which extend above said plates, substantially as and for the purpose specified,
3d, The casing, O, communicaling with the heater, A, or with its column, in combination with the casing, O', its tube, s, and float, o, connected to the throttle valve, m2, the whole being arranged and operating substantially as and for the purpose described.
4th, The arrangement, in respect to the heater, A, and column, B, of a cooler, F, consisting of a casing divided by partitions and pipes into two compartments, one communicating with the column, and the other with the water pipes. cl. as set forth.
79.261.—SOLIDIFIED COLLODION.—Chas. A. Seely, New York

water pipes, cl, as set 101511. 79,261.—Solidified Collodion.—Chas. A. Seely, New York city.
claim the compound of collodion and nitro-glucose, prepared and com
under substantially as described.

I claim the compound of collodion and nitro-glucose, prepared and compounder substantially as described.

79,262.—SAD IRON.—Joseph Shalkenback, Chicago, Ill.
I claim the revolving sad iron, A, constructed with flat and curved faces, as described, and adjusted in its handle, F, by means of the spring latch, G, and the disk, S. in which are the notches, K, arranged to correspond with the desired position of the sad iron, substantially as set fort.

79,263.—STEERING APPARATUS.—Henry F. Shaw, West Roybury, assignor to J. A. Woodbury and S. S. Gray, Boston, Mass.
I claim the combination, with the rudder post, C, of the sieeve, G, provided with the eccentric, g, and the gears, D and E, substantially as and for the purpose specified.
The combination of a spring with the arm of the oscillating gear, E, substantially as and for the purpose specified.

79,264.—Pulley Block.—Henry F. Shaw, West Roybury, assigner to James A. Woodbury and Solema S. Gray, Boston, Mass. I claim the combination, in a pulley block, of the winning wheel, D, the differentialgear, pulleys, E F, and an eccentric sleeve, substantially as and for the purpose set forth.

for the purpose set forth.
79,265.-Type Writing Machine.-C. Latham Sholes, Car-

79,265.—Type Writing Machine.—C. Latham Sholes, Carlos Glidden, and Samuel W. Soule, Milwaukee, Wis.

We claim, ist, The key levers, D, whosting on the tulcrum, M, with the inner ends or fingers, u, reaching under the type bars, so tast the keys will act directly on the types, substantially als and for the purpose described.

2d. The spacer or ratcher, I, combined with the biurcated lever, H, connected with the bar, T, plyoted at, s, and resting on and across the arms of the keys, L, behind the fulcrum, m, so that striking the faces of the keys will work the teeth of the forks of the lever up and down and into the notches of the spacer, and give a certain uniform and regular space movement to the paper carriage, in line of the types, when made substantially as described.

3d, The pins, e, fastened to the table, A1, combined with the pawl, k, and the spring, I', to give the paper carriage a certain and regular cross-line movement, at a right angle to the space movement, from line to line, when made substantially as described.

4th, The clasps or pyrings, b, attached to the bars, C and C', on la the through the middle of the blatten. G. combined with the springs a stranger.

made substantially as described,

4th, The clasps or springs, b, attached to the bars, C and C, on ia iffic
through the middle of the platten, G, combined with the springs, a, attached

to the bar, E. to hold the paper to the carriage, and press it down smooth and tight, in passing under the platen, when made substantially as described, 5th, the spools, m. combined with the rudgeon, s', the staft, h, the pulley 8, 8 and R, the band, v', the cod, v', the weight. W, the ratcher wheel, V, the pawl, t, and the bar. P pivoted to the back of the case, A2, to feed a fresh part of the it king ribbon under the platen, to each type successively, when made substantially as described.

79,266.—>PIRIT LEVEL.—J. D. Sibley. Middletown, Conn.

1 claim the combination of the revolving sighted level with the disk, A, when arranged and operating as herein described, and for the purposes set forth.

forth. 79,267.—Car Track.—Sidney Skillman, Jersey city; N. J.-

79,267.—CAR TRACK.—Sidney Skillman, Jersey city; N. J.—
Antedated June 16, 1868.

1 claim, 181. The swiveling of the truck on a centre coincident with the centre of the boiler, by means of the swiveling ring, H, arranged substantially as herein described.

2s. 11 connection with the above, the tilting ring, G, turning on the centres, 1g 2 and h b2. arranged subs antially and for the purpose her in specified.

3d, In combination with the boller, D, located at or forward of the centre of the truck, the employment of a bearing, I, in rear of the centure of the centre of the sylvantially as to support or aid in supporting the weight of the car in such manner as to throw more of its weight upon the rear than upon the front axe of the truck, substantially as and for the purposes her empered for the centre of the sylvantially as and for the purposes her empered for the car in such manner as to throw more of its weight upon the rear than upon the front axe of the truck, substantially as and for the purposes her empered to the car in such manner as to those weights.

set forth.

4th, The within-described arrangement of the hole, P, stack, d. holler, D, and weak braces, M. or their equivalents, adapted to operate together in the manner berein specified.

79,268.—ELECTRIC FUSE.—H. Julius Smith, Boston, Mass.

I claim an electric fuse, in which the end of a single insulating cord, containing two insulated wires, is introduced directly into the cap containing the fulminate to be fired, in the manner described.

79,269.—Book Binding.—William Smith, New York city. I claim a book, when it has its covers secured to its leaves by tapes, or their equivalents that are passed through the leaves, and then their loose ends fastened to both the outer and inner sides of the covers, substantially as described. 79.270.—Automatic Dental Plugging Instrument.—

George B. Snow and Theodore G. Lewis, Buffalo, N. Y.
We claim a plugging instrument, baving all its autumatic operating park
out ained within the case forming the bandle of the instrument, substantially

as described. 79.271.—Transmitting Signals.—P. A. Sparre, Stockholm, Sweden. claim, 1st, The dik, d, in combination with the stop, e, stand, f, and bolt,

I claim, 1st, The dik, d, in combination with the scop, c, seeds, 1, and occ., g, as described.

2d, The rack. 1.in combination with the pinion, j, connected with the gear, k, by means of the rackbet wheel, i, in connection with the catch, m, escapement, n, and spring, o, as described.

3d. The plate, pl, affixed to the cylinder, p3, in combination with the lever, q, spi ing.r. hook, s, and spring, si, as described.

4th, The plate, t, hinged to its case as shown at, ti, in combination with the rack, i, square, u, pn, ul, and spring, u', as described.

5th, The stop, v, mounted on the disk, a', in combination with the inclinate planes, v1, v2, v3, book, s, and spring, si, as described, to operate substantially as herein set forth.

planes, v1, v2, v3, bock, s, and spring, s1, as described, to operate substance ally as herein set for to.

79,272.—INSTRUMENT FOR ADDING AND REGISTERING NUMBERS.—Nelson Spofford and Charles Corliss (ass.gnors to Charles Corliss), Haverbill, Mass.

We claim, ist, The graduated sliding spring bar, b, when applied and operatine, substantially in the mar ner and for the purpose set forth.

2d, The sliding graduated bar, b, in comoination with ratchet, f, and toothed-wheel, e, as and for the purpose specified.

3d, The combination with the bar, b, and spring, d, of the system of gearing, and the indicators, as set forth.

4th, The combination of graduated bar, b, casing, a, and head, c, substantially as and for the purpose specified.

5th, 7 he method of adding a series of figures of numbers, by means of a sliding bar, operating a system of gearing or watch-work, substantially as set forth.

79,273.—Sled.—Edward L. Stevens (assignor to Isaac Baker).

19,210.—SLED.—Edward L. Stevens (assignor to issue daker). Moulton Me.

I claim. 1st, The slotted bar, G, in combination with the spring, D, when constructed and operating substantially as and for the purposes described.

20, A coasting sled, having rudder, A, beli holder and bell, C, spring, E, slot, H, chang, K, ribbons, O, and stirrups, S, constructed, arranged, and operating substantially as specified.

ing substantially as specified. 79.274.—Reciprocating Steam Engine.—David Stoddart, '93.2'4.— KECIPROCATING STEAM ENGINE.—David Steddart, San Francisco, Cal.
I claim, 1st, The arrangement of the pistons, Bi B2, small pistons D1D2, valve, C, and the passages, H1 H2, communicating to the cylinder, substantially as described.
2d, The arrangement of the auxiliary passages, K1 K2, substantially as described.

described.
79.275.—Base-Burning Fireplace Stoves.—David Stuart

and Lewis Bridge (assignors to Stuart, Peterson & Co., Pridadelphia, Pa. We claim, 1st, The base of the stove, er closing the passages, E, F and G, stranged and communicating with the pipes, P and P, substantially as described.

stranged and communicating with the pipes, P and P, substantially as described.

2d. Two or more pipes, P and P', arranged within the outer casting of a fire place stoye, for convEying the products of combustion to the chimney, and for beating the air admitted to the space within the said outer casting, all substantially as and for the purpose herein set forth.

3d. The pipes P and P', in combination with the compartments, k, and k', and the valved partition between the same.

4th, The double cover, consisting of plates 3 and 3, one for fitting to the top of the slove and the other to the top of the feeder, and so arranged that the products of combustion can pass between them.

79,276:—Reamer.—Edward Sullivan, Pittsburg, Pa., Antedated June 6, 1868.

79,270.—REAMER.—Edward Schriften, 200, 200, dated June 6, 1888.

I claim the combination and arrongements of the cutters and blank head, C, coliar, e, sleeve, D. cone, f, rod, A, and the cutters and blanks, the whole being constructed, arranged, combined, and operated substantially as berein described, and for the purpose set forth.

79,277.—LAMP CHIMNEY.—Michael Sweeney, Wheeling,

W. Va.

I claim, as a new article of manufacture a lamp chimney, constructed with an oval bulge, regular in form, and with a uniform curvature, except is to the rounded lens formed projection, B, on the sides, substantially as set forth.

79,278.—Hat.—B. B. Taggart and C. W. Brown, Water.

town, N. Y.
We claim, as a new article of maquiacture, a hat or bonnet body, molded
r pre sed from a continuous sheet of formed paper, substantially as and
or the purposes herein shown and specified.

or pre sed from a continuous sheet of formed paper, substantially as and for the purposes herein shown and specified.

79,279—IUBRICATOR.—Hiram Taylor, Cincinnati, Ohio.
Iclaim, ist, A metallic band or collar, I, cast around and within the neck of the receively G, for the purpose of attaching the supporting stem, E, thereto, as specified.

2d. In combination with the band or collur, I of soft or fusible metal, applied as set forth, the threaded tube or bushing, F, of harder metal, for the reception of a serve won the upper end of the stem, E.

Sd, The rod, D, formed with a projection or an argement, d, on its upper end, to support out of contact with the journal, substantially as described.

78,280,—Combined Land Roller, Fertilizer, and Seed

Sower.—L. D. Taylor, Granville Centre, Pa.

I claim the combination of the front and rear hoppers, I I, and their respective plates, K K, Ditmen, PP, lev rs, LL. rollers, M M. and cylinders, A A, all constructed and operating substantially as specified.

79.281.—BBAKE FOR HORSE POWER MACHINES.—Daniel G.

Terrell, Wakefield, Pa.

I claim the arrangement in horse powers, of the mechanism herein described, whereby the break will be self acting when the belt breaks or files off, and also serves the purpose of a hand brake, to stop toe machine when the belt is on in running order, su behantially as and for the purposes herein

set forth.
79,282 — Horse Power. — Daniel J. Tittle, (assignor to Albi 9,802 - HURDE I O HEAR.

M. Tittle, Albany, N. Y.
I caim, let, The endless thread composed of the pieces, e.e., and furnished rith the links if, outer coss, g, and middle coss, h h, and all in combination with the said tread pieces, e.e., substantially as and for the purpose set.

with the fill he fill

79,283.—CAR COUPLING.—E. R. Whitney, Plattsburg. N. Y. I claim the arrangement of a four armed cross or wheel, B dog or lever, C, with spring, D, pawl, E, handle, F, and noteb, a, all made and arranged the coupling box. A, and operating substantially as and for the purposes above set forth.

the coupling box. A, and operating substantially as and for the purposes above set forth.

79 284.—HORSE RAKE.—Frank Wicks, Upper Sandusky, O. I claim, 1st, The runners, E. E. constructed substantially as described with the curved part extending from the root extremity to the rear of the line of the points of the teeth, P.P. for the purpose set forth.

2d, Locating the post, G, or its equivalent, back of the points of the teeth P.P. substantially in the manner and for the purpose specified.

3st, The concructions and arrangement of the roots or braces, N.O., with the bandles and cross bar, I, and nuts, tt, for the purpose of bracing the handles to the cross bar, I, substantially in the manner described

78,285.—SPRING BED BOTTOM.—Newiel J. Willis, (assignor to the Boston Spring Bed Company), Boston, Mass.

1 claim fits my oved spring hed bottom, as composed of the frame, B, the two round bars. A, the two series of springs, C. (of the kind described), and the series of sizes. D, arranged and applied together substantially as described.

Also, the construction and arrangement of the two buttons with the

Cribed,
Also, the construction and arrangement of the two buttons with the grooved sia's and their springs, arranged and applied to such state and round wars in manner substantially as explained. 79,286.—Cherse Press.—Putnam Wilson, Newport, assig-

19,200.—OHERDE I REGEL I AND THE STATE OF TH

around which the string or its equivalent, is looped, in the manner substantially as herein shown and described.

79.288.—Link Holder.—John Hartzell Zinn, Harrisburg, as is not to bimself and T. B. Weakley, Dauphin County, Pa.

1 claim the arrangement of the lever, D. with central arm, a, plyoted on the frame, A, and arm, C, in councitou with the arch shaped fiange, B, all made of iron, brass, or other suits, le material, for the bloiding of rope or wre substantially as herein set forth and described.

70.980.—A DEPLATUS FOR MOTIVE POWER.—S. G. Monce.

79,289.—APPARATUS FOR MOTIVE POWER.—S. G. Monce.

79,289.—APPARATUS FOR MOTIVE POWER.—S. G. Monce, Marathon, Ohio.
1 claim the combination of the verge, g, arm or lever, i, connecting rod, k. and fi, wheel, o, all as shown and described.
79,290.—CARBURETER.—Cbarles Benjamin Willoughby, (assignor to bimself and W. A. Bovey, Ubricksville, Ohio.
1 claim, 1st, The combination of the oil tank, B, gas chamber, D, pipes and valves, d, all as shown and described, and for the purpose specified.
2d, The combination of the gas chamber, D, gas pipe, E, and valves, f, substantially as shown and described, and for the purpose specified.
8d, The combination of the oil chamber, B, the air supply pipe, C, and valve, c, substantially as thown and described and for the purpose set for th.

valve, c, substantially as abown and described and for the purpose set forth.

79,291.— BREECH LOADING FIRE ARM.—William Morgenstern, Bartford, Conn., assignor to Herman Funke.

I claim, 1st, in combination with a hinged breech block, the firing pin, main spring, and sere, arranged within said block, substantially as described for the purpose set forth.

2d, Making the firing pin and dog, or bandle, all in one piece, substantially as described for the purpose set forth.

8d, in combination with a swinging breech and firing pin or bammer the project fing portion. E, the whole arranged to accomplish the locking down of the breech, substantially as described.

4th, The employment, in combination with an extractor, of and ejector, composed of a spring cam or hiper, such as herein described.

79,292.—FRUIT PICKER.—James H. Lament and D. A. Lament, Troy, Pa.

We claim the combination, in a fruit picker, of the vessel, A, and fingers, as as a, all substantially as shown and described.

## REISSUES.

REISSUES.

2,996.—HARVESTER RAKE.—C. Aultman, Canton, Ohio, assignee of Dantel E Swartz and Jonathan Kreamer, Millhelm, Pa. Dated May 12, 1868.

We claim, 1st, The combination of a main frame, supported upon two wheels, a laterally projecting platform and cutting apparatus which shall be in advance of the main axie, with the support of a series of combined rake and reel arms, rigidly connected with the finger bar 2d, The combination with a two wheel irons cut harvester, of a main frame between the wheels, the hinzed supporting hars, L. L. the cutting apparatus platform, and series of revolving rake and reel arms pivoted to a central hub, and criven by an extensible sust from the main axie.

3d, Mounting a combined rake and reel on a front cut harvester, in advance of the main axie.

4th, The combination of a combined rake and reel, having independent binged arms, a platform binged to the main frame and the support of the ree and rake rigidly connected with the platform and finger beam, so as to conform thereto.

5th, A series of pivoted arms of a revolving rake and reel, attached near the perciphery of an emisrged head or hub, in lines tangential to a circle, the centre of which is in the shaft around which said arms rotate, so as to deuse the revolving beads or rakes to approach the cutter in lines parallel or nearly parallel thereto.

nearly parallel thereto.
6tb, A combined revolving rake and reei, in combination with a hinged bar harvester, a coupling arm, and a movable brace or plate to support the finger bar, platform, and rake and reel.

inger bar, platform, and rake and reel.

2,997.—GRASS HARVESTER.—Jonathan Haines, Pekin, Ill., assignee by mesne assignments of bimself, Division B. Dated September 4,1855; reissue 545, dated April 18, 1858.

I claim, lat, in combination with a laterally projecting finger beam entirely unsupported at the outer end, and provided with open slotted guard ingers, through which and acros; said fingers the cutters are reciprocated in straight lines, a connecting rod or brace bar, m, having one end connected with and jointed to the teel of said finger beam, and its other undfaxibly connected with the maintrame of the macoline, for the purpose of controlling the lateral movements of the finger beam, so that the cutters and guard fingers will be keptin unison with each other throughout the up and down movements of said finger beam, independent of the main frame, substantially as set forth.

as set forth.
2d, The drooping bracket, J, extending downward below the main frame, for the purpose of giving support to the crank shaft, and to bring the crank and pitman more nearly in the line with the cutters, substantially as set

for:h.

31, The shield brace, Q, connected to the bracket, J, to protect the crank which drives the cutters while passing over cut grass and other obstructions, sunstantially as set fortt.

4th, Connecting the upper end of the brace or bar, m, to the bracket, J, substantially as set forth.

5th, The combination of the guide, y, with the short cutter, h, and open slotted narrow divider, when all are arranged for joint operation, substantially as set forth.

2,998.—GRASS HARVESTER.—Jonathan Haines, Pekin, Ill., assignee by mesne assignments of himself. Dated Sept. 4, 1855. Rel sue 545. Dated April 13, 1838. Division C.

I claim flexibly connecting a laterally projecting cutting apparance, which has its cutters rectifierated in straight lines through open-shotted guard fingers to the main Trame of a mowing machine, substantially asset forth.

I claim flexibly connecting a laterally projecting cutting apparatus which has its cutters reciprocated in straight lines through concertabled guard ingers to the main frame of a mowing machine, substantially asset forth.

The main frame and the gearing which drives the cutters of a mowing machine, monnted upon two uriving and supporting wheelas draft pole to draw the machine by, rigidly connected to said frame, and a finger beam and cutting apparatus (the cutters of which reciprocate through open slotted guard ingers in straight inea), flexibly attached to the main frame in such a manner as will prints aid inter beam and cutting apparatus to receive all their pend down movements from the undulation of the ground over which they are drawn, substantially as set forth.

In a mowing machine having a laterally projecting finger beam flexibly connected with the main frame, a lever so arranged that the driver can, while occupying has sea; by one single movement, raise the finger beam and cutting apparatus bodily toon the ground while he machine is in motion, to pass over obstructions, etc., substantially as set forth.

Connecting the lever by which the cutting apparatus is raised to the heel of the finger beam, substantially as set forth.

In combination with the main frame which carries the gearing to drive the cutters, to which is flexibly connected a laterally projecting finger beam provided with open slotted guard gagers and cutters reciprocating across said finger beam, and having its fulcrum upon the main frame, so that when the finger beam is raised by means of said lever, the weight of the entire cutting apparatus will be borne upon the main frame, substantially as set forth.

The combination and arrangement, in a mowing machine having a laterally projecting cutting apparatus, the cutters of which are reciprocated in straight lines through open slotted guard grayers, and the finger beam flexibly connected with one main frame of a lever conveniently placed within reach of the driver, to raise the cutting appar

is in motion, and a soluting device to lock with feath said level, and both the substantially as set torth.

2,999.—Harvester Rake.—Samuel Johnston, Syracuse, N. Y., assignee of Wm.T. Shaw and John Manz, Wilmington, Del. Dated Nov. 22, 1864.
We claim, 1st. The combination of a main frame supported on two wheels, a laterally projecting platform end cutting apparatus, so hinged to the main frame that the cutting apparatus shall be in advance of the main axie, with a series of combined rake and reel arms revolving on a support mounter on the platform. On a main frame supported on two wheels, a laterally projecting platform and cutting apparatus, so hinged to the main frame that the cutting apparatus shall be in avance of the main axie, with a series of combined ake and reel arms revolving on a support mounted on the platform.

30, The combination with a two-wheel front out harvester, of a series of combined rake and reel arms on a standard or support, mounted on a hinged platform, the arms being independently binged, and having a rising and falling movement independent of their atla of rotation.

4th. The combination with a two-wheel front-out harvester, of a main frame, and as ir less of rake and reel arms provided to a crown wheel or central hinh, located on the platform, and driven by an extensible connection with the main axie.

5th. The combination and adaptation of a combined rake and reel, which revolves entirely around a vertical center, so that it may be applied to the platform of a front-out hinged-bar harvester, in front of the main axie and below the highest point of the drive wheel.

6th. The revolving bead, H H', made in two disconnected parts, adapted to be coupled and uncoupled by means of the key, hi, and recess, b2, so as to cause the rakes to operate when the machine is moving forward, and to remain a rest during the backward movement thereof.

7th, The frame or casing, F, tormed with the guide, ft', for controlling the movement of the rake and reel sing described.

8th, In combination with the

3,000.—Fluting Machine.—Geo. E. King, New York city. Dated February 26, 1867. Division A.

I claim the guide. E constructed with one or more curved or arched portions, a', in combination with suitable fluting rollers, substantially as here in set forth for the purpose specified.

3,001.—FLUTED PUFFING.—Geo. E. King, New York city.

Dated February 26, 1887. Division B.
I claim the within described puting, as a new article of manufacture the same being formed by crinkling, gathering or irregularly waving one portion of the strip of muslin or other material simultaneously with fluting it along the edges of such portion, as at g, and forming flattened borders or portions, b, outside of the flutes, or between two next adjacent rows of them, to receive stitching, substantially as specified.

3,002.—STILL FOR PETROLEUM, ETC.—Charles Lockhart and

John Gracie, Pittsburg, Pa Dated November 17, 1868. Division A. We claim providing a still need for distilling bydrocarbon, with a scraper or scrapers combined with a receiving devire, said a raper or scrapers being rotated during the process of distillation, and operating with relation to the bottom of the still and said receiving device, substantially as herein described, and for the purpose set forth. -Still for Petroleum, etc.-Charles Lockhart and

John Gracis, Pitsburg, Pa Dated November 17 1863. Division B We claim as till provided with a place of rounding the control of the still and its contents, that the vapor evolved from the contents, when inserted between the two thicknesses of the tag or label.

3,004.-IMPROVEMENT IN PIANO-FORTES.-G. C. Manner,

New York city. Dated November 18, 1866. I claim 1st, Placing the damp-lifters in a slot of the metal frame bebind the point supporting the strings, substantially as and for the purpose de-

td.

The metal frame, A, when embeded in the wood-work of the piano so as to buttagainst the wrest plank, and when provided with an ind bollow filled bridge, a, with a slot, b, and a diagonal brace, d, all and operating substantially as and for the purpose herein shown and thed.

assorbed.

3,005.—Bit Brace.—Greenleaf Stackpole, New York city, and J. N. Winslow, Portland, Me., assignees of Greenleaf Stackpole, Dated September 23, 1862.

I claim it In combination with a divided bit-shank socket, baving a contracted neck, the ring, E, for holding the hearings upon the shank of the bit, constructed and operating sy bstantially as set forth.

2d, i he bearings, C C', baving grooves, al and a2, therein, to admittee the whole length of the socket or the bit shanks without an enlargement of the grooved to the extent of the whole length of the socket or the bit shank substantially as specified.

3,006.—HARVESTER - Mitchell, Vance & Co., (assignees of

3,006.—HARVESTER — Mitchell, Vance & Co., (assignees of Edgar M. Smith) New York city. Dated Febrary 23, 1864.

I claim 1st, in combination with the main driving and supporting wheels, running loosely on their axies or journals, the main rear wheels, D. running loosely on the hubs of said drive wheels, and having aratchet and pawl connection with each other, substantially in the main rand for the purpose herein described and represented.

2d, The arrangement of the two sets of plates and hoxes on the opposite sides of the main frame, so that the cutting apparatus may be arranged on either side as set forth.

3d The combination with two sets of plates arranged on opposite sides of the main frame, the curved bar or brace, F. extending from one to the other so as to leave unobstructed space at I, for the free action of the rake as desorthed.

so set to leave unous recently access, for another section of the section of the



## ATENTS

The First Inquiry that presents itself to one who has made any improvement or discovery is: "Can 1 obtain a Patent?" A positive answer can only be had by presently a complete application for a Patent to the Commissioner of Pitents. An application consists of a Model, Drawings, Petition, Oath, and full Specification. Various official rules and formalities must lieo, be observed. The efforts of the inventor to do all this business himself are generally winout success. After a season of great perplexity and delay, he is usually glad to seek the aid of persons experienced in patent business, and have all the work done over again. The best plan is to solicit proper advice at the beginning.

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