OFFICIAL REPORT OF

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74,742.—Horse Blanket.— Seth W. Baker, Providence, R. I. I claim a horse blanket, manufactured or made up of the fabric herein described, as a new article of manufacture. -REVOLVING HAIR BRUSH .- Jabez Bayston, Chica

I claim the combination of the frame, A B D, the cylindrical brush, E, and the gearing for operating the same, and the claim support. J. arranged and operating substantially as and for the purposes specified and snown. 74,744. ROTARY ENGINE.—Jos B. Bennett, Brooklyn, N.Y. I claim the arrangement of the springs around the wheels, D. D. with the process EE, and cylinder, A, substantially as and for the purpose specified. 74,745.—Shoe Nail-Manes M. Bent, Wayland, Mass I claim the cut shoe nail, with conical head, and tapering and parallel sides

as described. 74.746.—Knob Latch for Door.—Albert Bingham, New-

74,746.—KNOB LATCH FOR DOOR.—Albert Bingham, Newtonville, Mass. Antedated Feb. 7, 1858.

I claim the combination and arrangement of the latch, having link, B, and armed end, C, the removable tumbler, D, and spring, S, when the parts are constructed and operating substantially as described.

74,747.—SPRING BED. BOTTOM. — Samuel F. Bouton, and Nathan P. Ames, Chicago, Ill.

We claim the combination of the arms, d and e, formed upon the coil of the spring, D, as shown, and a socket, c, applied or secured to the slat, C, in the manner and for the purposes specified.

74,748.—FARM GATE.—Henry H. Butler, Troy, Mich.

I claim 1st, The horizontal sliding bar, D, when constructed and operating substantially as and for the purpose set torth.

2d, The combination of the above with the rollers between the double posts. 2d, The changers, BC, with their rollers, and the gate, A, when arranged, constructed, and operating, substantially as and fortine purposes described.

74,749.—MODE OF ATTACHING CIRCULAR SAWS TO THEIR MANDRELS.—Ela Calley, Franklin, N. H.

I claim the arrangement of the separate nut, C, and its confining screws, b I, shart, A, the male screw, c, and the shoulder a, applied to such shaft in the manner and for the purpose substantially as specified.

74,750.—Piston.—S. E. Chubbuck, and Isaac Y. Chubbuck, Roxbury, Mass., assignors to themselves and S. E. Chubbuck, Jr.

Roxbury, Mass., assignors to themselves and S.E. Chubbuck, Jr. We claim, Is., The peculiar construction of the ring sections, H, substantially as described and shown.

2a, The open-sided radial grooves, ff, in combination with the spring weigr. K, substantially as described.

3d, The lugs, u, in combination with the arms, c, to support those sections which work in a vertical or approximately vertical position, substantially as described.

described. 74,751.—Sewing Machine.—Edwin E. Clark, Ann Arbor,

I clam. 1st, The slotted plate, C, constructed substantially as described

l claim. 1st, The should have, o, constructed substantially as described, in combination with the shoulder, E, constructed substantially as described, in combination with the should substantially as described, in combination with the should substantially as described. Sd, The curver eye-pointed needle, F, operating in the arc of a circle, the center of movement of the cloth, and operated by means substantially as described.

4th, The looper, W, constructed and operated substantially as described.

5th, The combination of looper, W, and curved eye-pointed needle, F, when consumpted and operating together as and for the purpose set forth.

constructed and operating togerher as and for the purpose set forth.

74,752.—PAINT BRUSH.—Amos Cutter. Chelsea, Mass.
I claim the screw rod, g, when permanently secured on the handle, and forced downwardly by the femalescrew in the handle, f, in connection with the cylinder, a, as and for the purpose described.

74,753.—COAL STOVIE.—E. A. De Camp, St. Louis, Mo. Antedated January 21, 1863.
I claim, 1st. The annular cooking top, C1 C2, in combination with the stove, A. substantially as generabed and set forth.

24, The diaphragmas B, and C3, when combined with the disks, C1 and C2, substantially as described and set forth.

74,754.—SULKY CULTIVATOR —Elias S. Easterday, Nokomis

'III. I claim, 1st, Extending the plow beams, D, forward to form the tongue o hemachine, substantially as herein sbown and described, add for the pur

the machine, substantially as herein shown and described, and for the possest forth.

2d. The iron frames, O, adjustably secured to each other, and sliding laterally upon a rod or equivalent slide attached to the axie, B, in combination with the plow beams. D, substantially as herein shown and described, and for the purposes set forth.

3d. The combination of the foot levers, Q, with the plow beams, D, and with the slotted irons or frames, O, substantially as herein shown and described, and for the purpose set forth.

4th. Adjust-bby securing the plows. M, to the standards, K, by means of sockets, N, substantially in the manner herein shown and described, and for the purpose set forth.

sockets, N, substantially in the manner acress shown and described, a data the purposes at forth.

5th, The combitation of the proved levers, E, chain, F, and pulley, G, with the plow beams, D, and with the bars, c1, connecting the forward ends of the pars, C, substantially as herein shown at described, and for the purpose setforth.

74,755.—MANUFACTURE OF TIN-LINED LEAD PIPE.—John

Farrell, Pittsburg, Pa.

I clsim, ist, The die, e', in a plunger, c, in combination with a cylinder, a and mandrel, sin a machine for making tin lined lead pipe, construct d and operated substantially in the manner and for the purposes hereinbefore set operated substantially in the manner and for the purposes hereinbefore set forth.

2d, The method hereinbefore described of constructing a compound ingot of the and lead, in the manufacture of tin-liued lead pipe.

3d, The use of a flange, 1, attached to the tin partof a compound ingot of lead and tin, for the purposes and in the manner substantially as above set forth.

lead and the for use purposes and the land of the lead ingot by the method forth.

4th, In the production of a compound tin and lead ingot by the method here the bettor a described, the use of a cover, g, for protecting the tin pipe or the ngot from the heat of the molten lead, substantially as and for the purposes hereinbefore set forth.

74,756.—Burning Fluid.—George W. Flowers, Jacob C. Happersett, and D. W. Happersett, Urbana, Ohio.

We claim the fluid prepared of the materials and substances as nerein described.

scribed.
74,757.—WORK TRIMMER FOR BOOTS AND SHOES.—A. V. Hill, Limestone, N. Y. Antedated Feb. 12, 1868.
I. claim, 1st, The gnard, c, when applied to a work trimmer, in manner and for the purpose seabs antially as described.
2d, T. e blade, B, itted adjustably into a head. A, by the shank, b, as herein set forth, and for the purpose substantially as described.

set forth, and for the purposes substantially as described.

74,758. — IMPLEMENT FOR MAKING EYELETS. — David K. Hossie, Providence, R. I.

I claim, ist. The movable forming Punch, No. 2, constructed with a cylindrical shape or former, e, a shoulder, i, a bevelled end, a, and a center cavity, t, when combined with mechanism so as to operate substantially as described, for the purpose specified.

2d. The stationary die. No. 2, constructed with a circular entrance, e, a constructed with a circular entrance, when combined with mechanism so as to operate substantially as and for the purpose specified.

when combined with mechanism so as to operate substantially as and for the purpose specified.

3d, The movable cutting punch, No. 3. constructed in a tubular form, with a bevelled surface, 2, and a concentric cutting edge, c, when combined as the mechanism, such as herein described, so as to operate substantially as and for the purpose specified.

4th, The method herein described, of forming an eyelet by first converting a plai chet or disk of metal into a tube with a closed end, and then cutting out the closed end, and expanding this severed edge of the tube, to form the fiange, by means substantially as described.

5th So combining a drawing punch and an open drawing die, constructed substantially as described, that the planchet of metal from which the eyelet is to be made, will cuter in at the front end of the die, and, passing through, be delivered, completely formed into an eyelet at the rear end of the die, substantially as discribed.

74,759.—Animal Trap.—Samuel Huffman, Westfield. Ill.

1 claim, 1st, The pivoted chamber, B, turning on its axis, turnished with two opposite openings, ce, and the lateral opening, D, as and forthe purpose specified, or equivalent.

d.or equivalent combination with revolving chamber, B, the auxiliaryballs, as de-

seribed. 74.760.—Breech-Loading Fire-arm.—Barton H. Jenks.

17., 100.— DREECH-DOADING FINE-ARM. — DAITON 11. Jenks, Bridesburg, Pa.

I claim, 1st, Combining a vibrating slotted breech piece, D, avibrating locking larch, E, and a hammer, F, in such manner that these pairs are confined between the cheeks, B, of the frame, and the hammer is on the outside of the breech piece, substantially as described.

2d. Arranging the tunnoler, G, between the cheeks of the vibrating breech piece, D, and affixing the hammer to one end of the tubular bearing of said tumi ler, substantially as described.

3d, so combining a vibrating hammer, F, which is arranged outside of a vibrating breech niece, and between the frame cheeks, B, that said hammer any beful cocked or halfocked without moving the preech piece, substan

tally as described.

4th. Providing for cocking a hammer, which is arranged outside of an elyoted to the axis c. of a vibrating breech piece, it the act of drawing back the latter by means of an extension, b', or its equivalent, substantially as described.

scribed.
5th The relative arrangement of the breech piece, D, locking nortion, E, tumbler, G, and trigger. H, thesa mebeing constructed and operating substantially as set forth.
74,761.—WHIFFLETREE.—Daniel W. Johnson, Blooms-

burg, Pa.

1 burg, Pa.

1 claim a whiffletree, havingspring, A. slide, B, levers, H and M, chains, K and button, C, constructed combined, and arranged, substantially as spe-

cified.
74,762.—Animal Trap.—Wilmer W. Leech (assignor to himself and George Contant). Pittsburg.Pa.
Iclaim the curved or hent and colled wires, e.e., one or more, single or double, in combination with the balting and tripning devices, constructed and arranged substantially as and forthe purposes set forth.
74,763.—KNIFE AND FORK SCOURER.—Mary Merrill, Marengel 11.

74,763.—KNIFE AND FORK SCOURER.—Mary Merrill, Marengo. 111.

1 claim the combination of the box, A. the inner casing, E, the sieves, B and C, and the cork or rubber, D, as and for the purposes specified.

74,774.—MANUFACTURE OF BUTTONS.—Lewis Moses, New Yorkelty, assignor to himself and James C. Walter, Harlem, N. Y. Antolated Feb. 7, 1868

1 claim. 1st, The cement consisting of liquid glass and finely powdered mineral matter, substantially as described, for the purpose specified.
2-7, The plate, B, containing the cement filled into the circular recess in the hutton, A, and subjected to heat, as herein set forth, for the purpose specified.

74,765.—Brick Machine.—Meltier Nye and Abraham J.

Knisely. Chica 70, ill.
We claim. 1st. The combination of the movable fulcrum, F, connecting levers. EM and A. with rolling shaft, P, chain, R, and weight, s, substantially as and for the nurpose shown.
2d. In combination with the movable fulcrum. F, theconnecting rod. G, lever, H, chain, I, weight, y, and rod, j, substantially as and for the purpose shown.

shown.

3d. Combining the adjustable rivoted springs. f, with the hinged valves, g, substantially as and for the purpose herein shown and described.

74,766—MILK AND PROVISION RACK.—Erasmus Osborn,

Rome Center, Mich.

I claim the construction of a rack, as hereinbefore described, with per pendicular posts, A. transverse bars or feet, B, horizontal bars. C, cap, E, and ectangular pans. F, when arranged and operating substantially as and for he nurposes described.

the nurposes described.

4.767.—SHERP HOLDER AND FLEECE FOLDER COMBINED.—
George Paine Washington, Ohio.
Iclaim the herein described sheep table, consisting of the top, B, sides, C.
leaves, D, adjusting standard, F, and box E, all constructed and arranged to
operate in combination with the apron. H, and roller, I, in the manner and
for the purpose substantially asset forth.

74,768.—WATER ELEVATOR.—Wm. M. Palmer, Middlebush,
N. J.

N.J.
I claim, 1st, The ropes, F, cylinders, G, collars, G1, roller, H?. oscillating levers, H, and lever, I, combined so as to operate substantially as set forth. 2d. The bucket, A, swinging on the arm, D, and provided with the spring hook, K, arranged to operate substantially as set forth.

3d. The arrangement of the slides, C, arm, D, buckets, A, bail, E, and hook N.J. I claim

3d, The arrangement of the slides, C, arm, D, buckets, A, bail, E, and hook K, substantially asset for th.

4th, In combination with the cylinders, G, and collars, G1, the oscillating arms, H, substantially as described.

5th. In combination with the ways, B', and stide, C, the lever, I. arranged to operate substantially in the manner and for the purpose set forth.

74,769.—CONCRETE BRICK MACHINE.—Isaac Pardee, Vine-

74,769.—CONORETE BRICK MACHINE.—Isaac Pardee, Vineland, N. J.
I claim. Ist. The arrangement of the levers. F and J, when the same are connected with the sliding box, D, in the manner set forth.

2d. The sliding box, D. in combination with the aprights, B, plate, C, pin, b, lever, F, chain. K, shatt, I, and lever. J. all made and operating substantially as a "d for the purpose here in shown and described.

3d. The box, D, when provided with a core, E, in combination with the sliding mlate, L, that has grooves, e, and fits over strips, f, as set for b.

4th, The hinged platform, O. in combination with the box, N. and box, D, allmade, and onerating seb-tantially as and for the purpose described.

5th. The springs, d, when arranged as set forth, for the purpose of keeping the box, D, up, as set forth.

74,770.—COAL HOD AND SCREEN.—Amos Porter (assignor to himself and N. S. Payne). Charl stown, Mass.

74,770.—COAL HOD AND SCREEN.—Amos Porter (assignor to himself and N. S. Payne). Charl stown, Mass.
I claim. 1st. The combined had or ssh ban and sifter, when it is made of two parts so constructed as that one halffts mo or upon the other half, and the hard half as of the sifting bottoms are so arranged as not to come apposite to each other when one pan is put into the other, thus fitting the parts to set as a half or ash pan, all substantially as described.

2d. The rotating holder or sifting frame to hold the two parts of the hod sifter together, in combination with the hod cifter, when all are constructed and used substantially as described.

3d. The stationary holder or hod trama, when constructed with bails or handles, in combination with the two containing vessels or pans, when bored in the bottoms, all substantially as described.

4th, The general construction and arrangement of the whole device, when made and used substantially as described.

used substantially as described. -Cord Retainer for Pictures and Mirrors.—

Wm. Read, Jr., Boston, Mass. Ant dated Oct. 10, 1867. I claim the frame, a. provided with a projecting end or point, c, in combination with an elastic plate, b. 48 and for the purpose spec fied. 74,772.—MECHANICAL DONKEY.—Alfred Shedlock and Wm.

Shedock New York city.
We claim, 1st. The combination of the cam wheel. K, made as described, with the Spring, M, having a notched detent plate. N, attached thereto, for the purposes hereinbefore described.
2d, Also, in combination with the reacting spring, M, and a waiking donkey, the independent or adjustable rider, Q, for the purposeshereinbeforeset forth. rorth.

3d. Also, in combination with the feet of a walking donkey, the claw teethed shoes, S, or equivalent devices therefor, for the purposes hereinbefore set forth.

74,773.—SLEEPING CARBERTH.—Wm. B. Snow, Chicago, Ill. I claim the coil springs, L, enclosed in boxes between the floors of the car, nombination with pulleys, m n, cords G, and berths E, arranged substantally as set forth.

tally as set forth.
74,774.— Portable Grinding Mill.—Ambrose W. Straub,

Philadelphia, Pa.
I claim scurifig firmly down together upon the frame, A B, cast in one piece, as shown and described, the detachable cirb d', coping ring b', and hopper stool F, by means of tour nutted screw bolts, as as as as 5 as, substantially as and for the purpose herein described.

74.775.—CULTIVATOR.—C. F. Taylor, Vassalboro, Me.

I claim the A-shaped cultivator, A, with its center piece, a, and cross piece, a', in combinat on with the teeth, b, so arranged as to throw the earth inward, as and for the purpose described.

74,776.—COTTON CLEANER.—J. W. Thorn. Courtland, Ala.

14,776.—COTTON CLEANER.—J. W. Thorn. Courtiand, Ala. I claim, let, Feeding drum F. A, catch lever L. C. T., rachet C. R., and lug I.g., the whole combined and constructed and operating in the manner and for the purpose above set if orth and described.

2d. The lever L', catch C. K. door D, and weight W, the whole combined in the manner and for the nurpose above set forth and described.

3d. The combination of the drum F. A, its catch lever L. C. T., and ratchet C., and coor D, lever L', and catch C. K., and weight W, with a cotton beating and cleaning machine, the whole constructed and operated in the manner and for the purpose above set forth and described.

74.777.—MACHINE FOR SHEETING AND PRESSING TOBACCO.—

Wm. H. Watson, New York city.
I claim, ist, The combination of two or more endless metallic belts, contructed substantially as described, for the purpose specified.
2d. The combination of the side belts with the same, for

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th, Adjusting the cylinders D and D2, substantially as shown and for the purpo es indicated.

74.778 — F'LUID METER.—J. W. Weller, Cleveland, Ohio.

1 claim, ist, The casks C C', arranged in combination with the vibrating box A, in the manner and for the purpose substantially as set forth.

2d, The faucets D D' and E F', handles G, and chain F, in combination with the cakes C C', levers H, and box A, when arranged and operated in the manner and for the purpose set forth.

3d, The supplementary box A', adjusting screws P, and bail B', in combination with the vibrating box A, for the purpose and in the manner as described.

4th, The registering apparatus, consisting of the gearing R', dial f, hands c d, and lever Q, when arranged and operated in combination with the box A, in the manner and for the purpose set forth.

5th, The vibrating box A, in combination with the ball I, and levers H H', substantially as and for the purpose set forth.

74,779.—Burglar Alarm.—I. M. Wells, Jeffersonville, Ohio. I claim, ist, The rotary match lighter C, applied to a burglar alarm, and

I claim, ist, The rotary match lighter (a, applied to a burglar slarm, and operating by a complete revolution, substantially in the manner and for the

operating ny acomplete revolution, substantially as the matter and the purpose described.

2d, The combination of the match lighter C, with the key E, substantially as and for the purpose described.

3d. The match holder B b, mounted in the box A A', and arranged and operating substantially as described.

4th, The combination with the match holder B b, of the fuse N, as and for

the purpose set forth. 74,780.—Detaching Check Rein.—Abram Westbrook and

Stephen O. Doan, Leona, Pa.
We claim, 1st, A cord attached to the check rein and extending back and confiend in one of the criving reins, substantially for the purpose as de scribed.
2d, The combination of a check rein with a cord for detaching and attaching the same, substantially as specified.
71,781.—PERMUTATION LOCK.—Anton Wetzel, Cincin nati, O.

It Claim, is, in combination with the tumbler D, the miter wheels G H, by hich the gated disks F F' F'' F''', are situated and operated at right an es to the operating handle I, of the lock, as described and for the purpose ide". . The inclined headed bolt K K', pin L, sprin "O, and disks Ppp', are ted and operating in the manner and for the purpose set forth. 74,782.—FIRE LIGHTER.—Levi H. Whitney, Vallejo, Cal.
I claim as an article of manufacture, a fire lighter, constructed of the parts
arranged substantially as described. 74,783.—TRAVELER'S TRUNK.—John N. Wunderlich, Phila-

74,783.—TRAVELER'S TRUNK.—Journ 17. In detection, delphia, Pa.

delphia, Pa.

I claim, 1st., The boot-rack made by the combination of the horizontal shelves, n n, and, folding legs E. when arranged beneath a traveling trunk, in the manner shewn and described.

2. The trunk A D, opening as shown, when so combined with the folding legs E. that the cover at forms a bureau table, and the tailing front, C, a writing desk, substantially as shown and described.

3d. The combination of the under mentioned parts when so arranged in a traveling trunk as to form a tailet mitror his, table 24, writing desk C, and boot-rack, n, in the manner shown and described.

74,784.—Measuring and Tallving Attachment to Theashing Machine.—W. F. Abbott. Marengo, III.

(4), 104. — MISASURING AND TABLE THE THRESHING MACHINE.—W. F. Abbott. Marengo, Ill. I claim, 1st. The elevator box a, pulleys F. F. beltm, and buckets x, in combination with the bifurcated spout C C', doors D. D, measuring chambers M, and doors N. N, all constructed, arranged and operating substantially as set

and doors N N, all constructes, arranged and operating substantially as set forth.

24. The combination of the pivoted doors D, pivoted lever d, and plate d'with the bifurcated spout C C', and measuring chambers M, substantially as and for the purposes setforth.

34. The combination of the silding bar, a, pivoted pawls, l, doors, N, having projections, i, double rathet bar, h, springs, q, pointer, s, and register, k, substantially as described and represented.

4th. In combination with the above the key, w, substantially as described and for the purposs specified.

5th, The doors, D, substantially as shown and described in combination with the bifur cated spont, C, and measuring chambers, M, for the purpose of alternately opening and closing said spout, all as set forth.

6th. The projections, i, in combination with the discharge door, N, of a grain-measuring chambers, substantially as shown and for the purpose specified.

fled.

7d, The bar a and its pawls, l, in combination with the ratchet bar h and projections, l, or other equivalent device, substantially as shown and described and for the purpose set forth.

8th, The ratchet bar, h. incombination with the tally-scale of the case, k, substantially as shown and described for the purpose of tallying grain, all as set forth.

set forth. 74.785.—MACHINE FOR BORING POST HOLES.—A. Q. Allis, Dayton, Ohio.

I claim, 1st, Thehalfnut, o', and the method of engaging and detaching the same from the boring bar, substantially as and for the purposes described. scribed.

2d. The tube, E. in combination with the auger. D, substantially as described for the purpose set forth.

3d. A post hole boring machine so constructed as to swing round on the platform, substantially as and for the purposes described,

74,786.—PILLOW SUPPORT.—Emeline T. Annis, Mount Mor-

74,786.—PILLOW SUPPORT.—Emeline T. Annis, Mount Morris. N. Y.
I claim the pillow. A, formed on the plate, B, the bracket, C, the rod, E, and the nut, g, arranged, combined and operating substantially as shown and described for the purposes set forth.
74,787.—Trakettle.—Corneliu. Anthony (assignor to C. L. Sanford, George B. Near and James Trover), Schenec ady, N. Y.
I claim, ist. The key or wedge, B, in combination with recess, C, and bail.
D, and swinging cover of a teakettle, substantially as shown and escribed, 24. The lug orear, A, of a teakett e when made with a recess, C, and used substantially as and for the purpose shown and described.
74.788.—Butt Hinge.—M. A. Avery, Groton, N. Y.
Iclaim the right and left butthinge having the screw holes countersunk upon each side when its leaf, 1, 15 provided with an opening between the socket, a, and abutment, d, f.r. the application of the eye, c, of the leaf, B, as herein shown and described.

74,789.—Belaying Cleat.—Jonathan Bangs, South Dennis.

Mass.

Idiam the cleat, constructed as described, consisting of the lever. A lawing upon its upperside the hook, H, and pivoted between the cars, a, of the plate, all operating as described whereby the tension of the rope u von the hook. H, forces the long arm, K, upon the rope beneath it in the groove of the plate, C, securely clamping said rope in position, as herein shown and described.

described. 74.790.—Washing Machine.—P. F. Bindewald, Strongs-

described.
74.790.—Washing Machine.—P. F. Bindewald, Strongsville, Ohlo.

I claim the combination and arrangement of the lever, I, shaft, B, arms, C. connecting bars, D, pivoted levers, E, ards, G, and beaters, H, constructed as described with each other and with the box or thin, A, substantially as herein shown and described and for the purpose set fort's.

74.791.—Preparing Finely-Divided Iron, And the Separation of Coppers, Silverand of the purpose set fort's.

-Gustav Bischo. Jr., Swansea, Great Britain, assignor to himself and John L, Kidwell, Georgetown, D. C.

I claim, 1st, The preparation of their divided metallic iron, in the manner and by the process substantially as rescribed.

2d. The combination and strangement of the recliver, F, with the furpose of redexidation of metallic copper from its solutions by the use of finely-dividedition, prepared as described and in the manner set forth.

3d. The precinitation of metallic copper from its solutions by the use of finely-dividedition, prepared as described and in the manner set forth for the manuracture of steel and for other manufacturing purposes. 5th, The use of finely-divided metallic copper produced in the manner set forth for separating silver from its solutions

74,792—Shoe For Car Brake.—James Brahn, Jersey City, N. J.

N. J.
I claim, 1st. The shoe, B. cast with sockets, c in combination with the plate. A, formed with projections, b a, substantially as described for the purpose specified.
2d. In combination with the above, the rubber strip, C, arranged substantially as and for the purpose set forth.
74.793.—LAMP BURNER.—Arthur W. Browne, Brooklyn, N. Y.

74.795.—LAMP BURNER.—Arthur W. Browne, Brooklyn, N. Y. I claim, 1st, The combination of the tube, B. and tube or wick deflector, C, constructed and arranged as herein described, and adapted for the employment of two flat wilks which are thereby spread and curved and made to produce a circular flame, substantially as are forth.

2 '. In combination with the elements covered by the first clause, the shafts, Fri, toothed wheels, f. and disk or operating device, F2 arranged and employed substantially as and for the purpose set forth.

3d. The zauze, G. in combination with the slotted wick deflector or tube, C, as and for the purposes set forth.

74.794.—HOREE RAKE.—E W. Bullard (assign or to himself and J. W. Jonkinsk Barre Mass.

(14,194.—HORSE Idak:—E. W. Bullard (assign of to nimself and J. W. Johkins) Barre, Mass
I claim. 1st, The combination with a rake whose teeth are caushle of being illied or elevated in order to discharge the hay, or the stationary clearers. F. and vertical fingers. G. operating in connectien with the rake, substantially in the manner and for the purposes herein shown and set forth.

2d. The combination with the axle and the rake te thand thills hinced to the axle as described of, the horizontal fingers, F, and shortverties threes, c. substantially in the manner and for the purposes shown and set forth.

74.795.—CATTLE PRICKER.—R. A. Carson and W. T. Peter, Briensburg Ky.

74.795.—Chtribe Pricker.—R. A. Carson and W. T. Peter, Briensburg, Ky. We claim, ist. An apparatus for preventing cattle from lying down or jumping, substantially as shown and described.
The strap, a in combination with the pricking points, e', substantially as shown and described, and for the purposes set forth.
74.795.—Churn.—C. H. Carver, Taunton. Mass.
I claim, 1st, The combination of the screw dasher. E, constructed as described, with the churn. B, having two or more inclined ribs or flanges, b', attached to its inner surface, substantially as here in shown and described, and for the purpose set forth.
2d. 'Ne combination of the clamp, H, constructed as herein shown and described, and for the purpose set forth.
2d. 'Ne combination of the clamp, H, constructed as herein shown and described, that is to say, with jaws, hi, hearing, hy, and arm, h3, with the dashershaft, F, and crank wheel, I, as and for the purpose set forth.
I claim ist. The combination of the other and inner case, E and A, constructed substantially as and for the purpose specified.
2d. Connecting the cover and bottom to the rim and sides of a paper box by mean sof strips of textile substance, 1, 2, 8, 4, more or less, substantially as and for the purpose set forth.
74,798.—Choritisslinis Holder.—Albert Comey, Cuyahoga Fals, Obio.
I claim the plate, B, with swinging cam, C, arranged in such manner as to

74.798.—CLOTHESLINE HOLDER.—Albert Comey, Cuyanoga Falls. Oblo.

I claim the plate, B. with swinging cam. C. arranged in such manner as to operate by its own weight from ether side, and flanged serrated roller, D, when combined as and for the purpose set forth.

74,799.—Mode of Treating Mineral Phosphates for the

Manufacture of Fertilizers.—John Commins, Charleston. S. C. I claim uniting phosphatic minerals or earth with a solution of common at, chloride of sodium, and water while hot, as and for the purpose herein escribed. 74,800.—Curling Iron.—Samuel E. Condon, Brooklyn,

E. D., N. Y.

I claim the curling iron, A, when secured in the metal case, C, by means of the catch, P, upon the case, fitting over the flange, G, upon the handle, B, 33 herein shown and de cribed. 74,801.—Dustpan.—Samuel E. Condon, Brooklyn, E. D.,

74.801.—DUSTPAN.—Samuel E. Condon, Brooklyn, E. D., N. Y.
I claim, 1st, The hingedcover, D, applied to the dustpan. A, and arranged in connection with the inclined flange, C, when a space is left between the hinge of the cover and the rear end of the parl, A, and when combined with the automatic coupling, all constructed, arranged, and operating as and for the parlose described.

2d, The automatic or self-acting coupling composed of the pivoted rad, E, secured to the bottom of the pun with a hook, f. at one end, and a weight, in the opposite end, and the staple, e, attached to the under side of the lid or cover. Di, substant illy as and for the purpose specified.

74.802.—RUNNING GEAR FOR WHEELED VEHICLES.—W. C. Cook, Appleton, Wis.
I claim, 1st, The combination of the reach, E, with the hounds, C C, of the front axle. A, the hearing plates, a at the rear of the hounds, the pivoted rear axle. B, and the segment bar, c, with the Front end of the rach connected to the by a staple, b, all arranged substantially in the manner as and for hysingle bott, it arranged and applied substantially as shown and described.

74.803.—GLOBE VALUE.—Wm. S. Cooper, Philadelphila, Pa.
I claim, 1st, The combination of the central guide piece, G, cap. B, and body, A, substantially as herein set forth.

2d, The arrangement of the spindle, S, central guide piece, G, cap. B, and body, A, substantially as herein set forth.

74,804.—Mode of Fecuring Labels to Glass-ware.—Ed-

74,804.—Mode of Securing Labels to Glass-ware.ward M. Davis (assignor to himself, J.B. Clark, and J. A. Hunter), Pitts-

buigh, i.a. The process for countersinking a metallic substance in glassware, in manner and for the pulposes substantially as described.

2d. The combination of the metallic substances, B and C. with the glassware, in manner and for the purposes steries set forth and described.

74,805.—GATE HINGE.—P. Dennis (assignor to himself and Geo. Leggette), Schuylerville, N. Y.

Geo. Leggette), Schuylerville, N. Y.

Iclaim the construction of the gate hinge consisting of the forked portion, having a socket in which the pintle, C, of the box, B, tits, said box carrying above the pintle, in the grooved guides, b, the roller, A, as herein according to the pintle, of the purpose specified.

74,829.—Horseshoe.—Jas. Jorey, Westville, Conn.

Iclaim a calk for a horseshoe, provided with two edges, and constructed and applied to the shoe in such a manner that it may be detached and reversed and either edge adapted foruse, as circumstances may require.

74,830.—Machine For Cutting Veneers.—Henry Kassing, 4,000.—GAID INITIAL.

Geo. Leggette), Schuylerville, N. Y.
I claim the construction of the gate hinge consisting of the torked portion
), having a socket in which the pintle, C, of the box, B, üts, said box carry
ng above the pintle, in the grooved guides, b, the roller, A, as herein ae
eribed, for the purpose specified.

E. Droll St Charles, Mo.

74,806.—CHANNELING TOOL.—F. E. Droll, St Charles, Mo. I claim, ist, The side bar, B, sa united with main bar, A, for the use and purpose as specified and herein set forth.

2d, The adjusting my smaller knife, p., to the smallor side bar, B, by means of the screws, indecledently of any other part of my machine, for the use and purpose as specified and herein before set forth.

3d, My s pring, E, as constructed, so that it may be moved up or down in main bar as a guide, for the use and purpose as specified and herein before set forth.

forth. The entire combination of my knives, spring, and bars, with my mode of adjusting my knives and spring, for the use and purpose as specified and herein set forth.

74,807.—STRAP FASTENER.—S. W. Durham, Ipava, Ill.

Claim the strap fastener, constructed as described, consisting of the plate, having upon one of its sides the loops, C.D, the latter bearing the tongue, whose inner end dits within the strap between the loops, C.D, as herein own and described. 74,808.—Sheep Shearing and Tagging Table.—Green Fen-

74,808.—SHEEP SHEAKING AND TAGGING TABLE.—GLOCK TOLL Streetsboro, Ohio.

I claim, ist, The bottom, C, consisting of the sides, D, yokes, F, and straps, g, as arranged, in combmation with the table, B, and adjustable neck block, G, for the purpose sect forth.

2d, The sliding supplementary top. I, sides, J, pillow, K, and extension legs, A, all constructed and arranged in the manner and for the purpose specific.

20. The strong supplementary top, 1, sites, 0, priory, and care taken rese.
A, all constructed and arranged in the manner and for the purpose specified.
74,809.—Frame for Carriage Tops.—James H. Flagg, Per-

74.809.—FRAME FOR CARRIAGE TOPS.—James H. Flagg, Perkinsville, Vt.
I claim the carriage top frame consisting of two or more bows of metal or other suitable material, the side bows being hung on an internal one, and the whole jointed in the middle, in manner and for the purposes substantially as above set forth and described.
74,810. BEEHIVE.—M. D. Fogel, Alpha, Ohio.
I claim the within-described bive, when its several parts, exclusive of the trough, are constructed, combined, and arranged as set forth.
74.811.—TRACK CLEANER.—A. A. Freeman and Sam'l Ford, Philadephia. Pa.

74,011.—IRACK CLEANER.—A. A. Freeman and Samirout, Philaderphia, Pa.
We claim, 1st, Bed plate, BP, bestings, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10, shafts, TT'T" and T"' brooms, CBCB'CB' and CB''', shafts, S and S', bevelled wheels, V'V'V' and V'', geared wheels, GG'G' and G''', all constructed, combined, and operating in the manner and for the purpose above set ferth and described.
2d, The combination and arrangement of the screws, S Cand S C', with the car frame, so as to give the proper dip to brooms, CBCB' and CB'', as above set forth and described.

A track cleaner composed of the above-described parts, constructed aged, and operating in the manner and for the purpose above set forth

arranged, and operating in the manner and the purpose assistant described.

74,812.—BED BOTTOM.—J. C. Fry, Sidney, Ohio.

1st, Theloops, b b, constructed as described, consisting of the wires, E E, open at their outer ends, and applied to the slat. D, by inserting their opposite ends from the under side through the holes in the end of the slats, and bending them down upon the top of said slats towards each other, where they are again bent and inserted in the top of the slats as herein shown and described.

2d. The single metallic strip, C, secured to the end or side rails. A, by the strip, B, and bentto form loops, a, whose sides pass through the strip, B, and whose inner conderest against the inner side of said strip, as herein described for the purpose specified.

whose finite tentral research and for the purpose specified.

3d, Ha ing the hoops, b b, open in or near their center, as and for the purposes set forth.

4th, The combination of the loops, a, strip, B, loops, b, with central opening, elastic rings, F, as herein described for the purpose specified.

REFRIGERATOR.—A. Fuller and L. P. Reichert, Buffalo, N. Y.

We claim the combination of the fan wheel, C, sliding grate, M, the tubes
O P and Q, and charcoal chamber, J, arranged substantially as and for the

74,814.—HAY RAKER AND LOADER.—Merritt B. Fuller, San-

74,814.—HAY KAKER AND HOADER.—Souther and the born, N.Y.

I claim, 1st, The driving roller, B, provided with rows of curved teeth, b b, and intermediate teeth, s, which rest on the ground and support the roller in combination with the rake, c c, or equivalent, and endless carrier. C, operating substantially in the manner and for the purpose set forth.

2d, The guide blocks, ii, combined and arranged with therows of teeth, b b, and the slate, g g, of the carrier, for retaining the latter in place and prevent slipping, substantially as specified.

3d, The guide board, J, constructed and arranged and operating in the manner and for the purpose specified.

74.815.—Tov.—A. C. Funston. Philadelphia, Pa.

ner and for the purpose specified.

74,815.—Tov.—A. C. Funston, Philadelphia, Pa.
I claim a toy, consisting of a case, having a glass top and containing figures or particles of paper, or equivalent material, to which movements may be imparted, substantially a sand for the purpose described.

74,816.—THILL COUPLING.—Kingston Goddard, Richmond,

N.Y. Iclaim the spring, C, secured at one end to the bottom of the clip, D, and extending around the axle and clip, secured at its other end to the thill, B, forming a spring coupling, as herein described for the purpose specified.

74,817.—Thill. Coupling.—Kingston Goddard, Richmond,

N.Y. I claim the bending or forming of the outer end of the thill iron, substantially as shown and described, so as to be capable of being fitted to the under side of clip, in the manner as and for the purpose set forth.

74.818.—TRUSS.—Samuel Green, New York city.

Telaim the combination and arrangement of the main plates, A. A, hinged to the center plate, a, the stiff springs, c. c, the slotted adjustable plates, B.B., with cross-heading g, the pads. C. and the light springs, h, substantially as and for the purpose described.

74.819.—Harnness Michanism for Looms.—J. Greenhalgh,

as and for the purpose described.
74,819.—HARNESS MECHANISM FOR LOOMS.—J. Greenhalgh,

74,819.—HARNESS MECHANISM FOR LOOMS.—J. Greenhalgh, Sr., Woonsocket, R. I.
I claim, 1st, The links, O. and hooks, R. constructed as described, when removably pivoted together by means of the notched pivot and slot, o', in combination with the slide, L M, cylinder, S, asherein described for the purpose specified.

2d, The combination and arrangement of the arms, F H I, and adjustable connecting rods, J K, sliding bars, L M, links, O, hooks, R, cylinder, S, pawl, V, slotted arm, U, and upper jacks, P, with each other, substantially as berein shown and described.

74,820.—CARRIAGE THILL.—S. B. Harmon, Portland, Me.

brace. b, when applied substantially as and for the purpo

ses set forth.
74,821.—Fire-escape Ladder.—D. Haynes and Wm. Free, San Francisco, Cal.

We claim the combination and arrangement of the curved and grooved arm, n, with hinged ladder, c', winding roller, I, rope, H', and platform, B, aubstantially in the manner shown and described, for the purposes set

forth.
74,822.—MACHINE FOR CLEANING COTTON.—R. H. Hilton
(assignor to Mitchell & Allen), Newbern, N. C.
I claim the S-shaped perforated plate, b, the perforate plate, d. the side
plates having perforations, a, drawing-rollers, EE, and hinged screen, D, all
constructed and combined to operate as herein described for the purpose

specified.
74,823.—HARNESS-PAD TREE.—J. W. Hinman, Berlin, Wis.
I claim a harness pad tree having the two sides connected with a centerplece by joints or binges to render them flexible, substantially as and for the
purpose hereindescribed. 74,824.—GRAIN REGULATOR.—E. W. Hitchings, Potsdam,

14,024.—(FRAIN REGULATOR.—E. W. HITCHINGS, TUSSGAIM, N. Y. I claim, 1st. The combination of the revolving cylinder, A, and stationary cylinder, B, governor, D, cross bar, b, spindle, d, piston, E, and collar, q, substantially as set forth for the purpose specified.
2d, Incombination with the above, the distributing plate, J, side pieces, K, and screw, S, said plate being attached to the revolving cylinder, A, substantially as shown and described.
3d, The hopper, M, substantially as shown and described, in combination with the eyl-inder, B, revolving cylinder, A, and piston, E, all as set forth.
4th, Theguide, H, or the equivalent thereof, substantially as shown and described, in combination with a piston, E, of a cylindrical grain regulator, all as and for the purpose set forth.
5th The addissible feed coller, Q, substantially as shown and described, in as and for the purpose set forth.

5th The adjustable feed collier q, substantially as shown and described, in combination with the cylinder, it, and piston, E, all as and for the purpose set forth.

74,825.—Toy Gun.—Socrates Hubbard, Quincy, Ill.

Loam, lst. Constructing the slide, D. of two heads, h h, an intermediate sl.p., and pendant projections, ef, whereby lightness, with strength and during the stop, G., constructed and applied to the gun to retain the missile theremediate the horrel is inclined downward, substantially as set torth.

3d, The combination of the clastic cod. C. slide, D, trigger, E, and stop, G, all arranged for joint operation, substantially in the manner as and for the purpose specified.

74,826.—Self-raising Flour.—William C. Hughes, Scio, Mich.

I claim the preparation of self-raising flour in the manner herein described.

74,827. — BUTTONHOLE CUTTER. — August Humann, New York city.

I claim the blade, F, having a tooth, e, formed at the rear end of its cutting edge, when said plate is laterally adjustable, in combination with the blade. E, provided with a stud. b, working m a slot in the shank. C. and secured in position by the thumb screw, c, all constructed, arranged, and operating as and for the purpose herein specified.

74828.—TRUSS.—Charles A. Jefferies and E. F. Olds, Dex-

ter, Mich.

We claim, ist. The pad, A, provided with a rigid central projection as arranged in combination with springs, F, and belt, E, provided for the purpose and in the manner set forth.

2d, The pad, H, when constructed with a central adjustable projection or core, c, adjusting serews, I K, when arranged in combination with the cap, J, plate, G, and springs, F, in the manner as and for the purpose substantially as set forth.

y as set forth.

2d, A pad, when constructed with a central air chamber, L, ventilating boles, a, and plate, N, in combination with the screw, O, and spring, F, when arranged in the manner as described and shown m fig. 7.

4th, The segment slide. D, segmental plates. E, and section or cap, C, when arranged and pivoted to the section, A, by an adjusting screw, F, working in an operating a central core, B, so that when the pad is turned around from one side to the other the said central projection or core, B, will always occupy the same direction from t e centerof the beit, in the manner substantially as described and shown in figs. 8 and 9.

74,830.—MACHINE FOR CUTTING VENESIA.

New York city.
I claim the worm shaft, M, worm wheels, N, screws, M', and bar, G, upon the inclined guide, d, all constructed, arranged, and operating upon the laterally moving table, H, as herein described for the purpose specified.

74.831.—WAGON LOCK.—O. A. Kenyon, McGregor, Iowa.
I claim the slotted arm, F, of the lever, L, in combination with the pivot, a2, pawl, P. segment, R, connecting rod, a, and pivoted brake, C, as herein described for the purpose specified.

74.832.—MACHINE FOR POLISHING THREAD.—Peter Kerr,
Paislev. England.

74,832.—MACHINE FOR I COMMENT.

Paisley. England.
I claim, ist, The machine for polishing thread, constructed and arranged substantially as herein described.

2d, The construction and arrangement of the polishing apparatus herein described, in which the thread is polished by means of rollers having grooves or indentations, said rollers working up against the thread, one inside and the other outside the bank, austantially as herein shown and described.

74,832.—COMPOSITION FOR CLEANING MILLSTONES.—Daniel Finding Newville, Pa.

Kindig, Newville, Pa.

1 claim the aforegoing solution, prepared substantially as described for the urpose set forth.

74,834.—Bolt-making Machine.—Wm. Klemm and Robert Dittrich, Pittsburgh, Pa.
We claim the keys. H and I, or their equivalent, arranged in relation to he other parts of the machine, and operated substanta...y as described and or the purpose set forth.

We claim the keys. H and I, or their equivalent, arranged in relation to the other parts of the machine, and operated substantially as described and for the purpose set forth.

74.835.—HARVESTER.—E. E. Lewis, Geneva, N. Y.

1 claim, 1st, Thereversible conveyer, E, when sed to deliver grain from a reaping machine behind the inner bar, substantially as specified.

2d. A discharging appartusfor harvesters which will deliver the second swath from a reaping machine behind the inner bar, substantially as specified.

2d. A discharging appartusfor harvesters which will deliver the second swath from a reaping directly upon or so near the first swath as to form a doubleswathor windrow convenient to be loaded upon a wagon.

74.836.—HARVESTER RAKE.—C. Lidren (assignor to himself and R. Jackson), Lawyette Ind.

I claim, 1st, The himged platform, B, in connection with the elastic metallic bars, D, constructed, arranged, and applied in the manner substantially as and for the purpose herein set forth.

2d. The reciprocating rake, E, when operated from the wheel, K, of the main frame, through the medium of the jointed arms, h', rock shaft, I, link L. and the slotted arm, J, on the axle of wheel, K, all arranged substantially as shown and described.

3d. The carriage, F, in which the rake head or rod, b, is fitted, in combination with the lever, F', curved bar, G, projection, L, pin, J, and the curved bar, M, all arranged to operate or adjust the rake, substantially as section; the hooks, N', arranged as shown, and operated from the rock shaft, all arranged substantially as secified.

74.887.—Egg BEATER.—Henry W. Louden, Ephrata, Pa.

I claim the arrangement of the double beaters, D d C C', pipe or sleeve, B, and spin lie, A, with the pinions, a b, in combination with the box or cover, K T, cogged gear and handle, substantially in the manner and for the purpose specified.

pose specified.

74,838.—MECHANISM FOR OPERATING STATION'ARY MACHINERY.—Galusha Maranville, Hampton, N. Y., assignor to D. A. Wilson and Ebenezer Gould. Jr.

1 claim, 1st. Transmitting from one shaft, B, by intermediate gear wheels and shafts. C D E, motion to two revolving shafts, F and H, and to one oscillating shaft, G, all made and operating substantially as described, so that, from one driving shaft, three or more various machines may be operated, as set forth.

set forth.

2d. The manner of converting rotary into oscillating motion by connecting a short crank, L, on the revolving shaft, F, by means of a rod, n, with a long crank, m, on the oscillating shaft, G, substantially as herein shown and described.

-DE ICE FOR FASTENING SHOE LACING. -Oliver H.

74,839.—DE ICE FOR FASTENING SHOE LACING.—Oliver H. Marston, Sandwich, N. H., and Moses L. Morse, Stoneham, Mass. We claim, ist, The base, a having openings, c, for the lacings to pass through, and having the ends, d, bent upward at any convenient angle. 2d, The spring, b, having the edges, f, which are parallel to the upturned edges, d, of the base, slightly bent downward.

3d, The combination and arrangement of the base, a with the spring, b, to operate together as specified.

74,840.—LITHOGRAPHIC PRESS.—Charles Maurice, New York city. Anteclated Ech. 13,1868

73,840.—Lithiographic Press.—Charles Maurice, New York city. Antedated Feb. 13,1868.
I claim, 1st, The case, C, when arranged so that it can be adjusted for wider or narrower stones or blocks, substantially as herein shown and described.

2d, The case, C, when consisting of two pieces or halves, which are laterally adjustable on the frame. A, and when combined with the up-and-down adjustable frame or plates, H, all arranged and operating substantially as herein shown and described.

3d, The roller, D. when connected with the weighted frame, E, and with the stone or block, G, so that by 10 are motions of the roller the lateral with the moved over the sone; i.e., it will come in contact with and pressure of each part of the paper and stone, and will not be drawn over the same, thereby insuring neatness of workmanship.

4th, The adjustable rrames, C and H, in combination with the roller, D, and weighted frame, E, allmade and operating substantially as and for the purpose herein shown and described.

74.841.—HUB AND AXLE.—Norman Maxham (assignor to himself and C. G. Robbins), Hancock, Vt.

himself and C. G. Robbins), Hancock, Vt.

I claim the sand head, D, in combination with the hub, A, and cover, H, and axle, B, substantially as shown and described and for the purposes set

I claim the sand head, D, in combination with the hub, A, and cover, H, and axie, B, substantially as shown and described and for the purposes set forth.

74,842.—Animal Trap.—William Miller, Chicopee, Mass., assignor to himself and John Boyle, Erie. Pa.

I claim the combination and arrangement of the weighted drop door, B, loop or catch, C, pivoted catch, D, having a bait hook, d', formed upon or attached to it, spring, G, standard or post, E, and curved guard plate, F, with each other and with the top or cover, A, substantially as herein shown and described and for the purposes et forth.

74,843.—Wagon Coupting.—Henry Mitchell, Racine, Wis. I claim, 1st, The method of coupling the reach, C, to the other running parts of a wagon or other wheeled vehicle by means of the front coupling. A, and the rear coupling, B, constructed and attached substantially as shown and described.

2d. The construction of the coupling box, A, having the sides thereof bent inward, so as to form the sockets, a, substantially as shown and described and for the purposes set forth.

3d. 1 be flanges, c, upon the rear coupling box, B, in combination with the bolster, E, and the axie, F, substantially as shown and described and for the purposes set forth.

3d. 1 be flanges, c, upon the rear coupling box. B, in combination with the bolster, E, and the axie, F, substantially as shown and described and for the purposes set forth.

3d. 1 be flanges, c, upon the rear coupling box. B, in combination with the axie, F, substantially as shown and described and for the purposes set forth.

3d. 1 be flanges, c, upon the rear coupling box. B, in combination with the axie, F, substantially as shown and described and for the purposes set forth.

3d. 1 be flanges, c, upon the rear coupling box. B, in combination with each other and with the reach, C, and the hounds, D, in combination with each other and with the reach, C, and the hounds, D, in combination with each other and with the rear coupling box. B, and the axie, F, and bolster, E, substantially as

74,844.—Snow Plow.—George Place, New York city

148.44.—SNOW PLOW.—George Place, New York city.
I claim the combination and arrangement of the knives, A A and B B, in sections, when combined with one or more plows, attached to the truck frame, and with the frames, E E, of the truck, in the manner and for the purpose herein described.

74.845.—HARVESTER RAKE.—Abraham Quick, Wm. S. Opie, and Andrew J. Farrand, Rarttan, N. J.
We claim. 1st, A standard for a revolving rake and reel, with its base botted directly to the Innerenn of a finger beam, having a rocking or rolling axie above the plane of the cutters between the finger beam and main frame, whereby the finger beam can rock axially, without disturbing its relation to the rake.

whereby the iniger beam can loss action, whose states the rake.

2d. The combination, substantially as described, of a revolving reel and rake with a standard bolted directly to the inner end of an axially rocking hinged finger beam, and without support on the main frame.

3d, Mounting a rake and reel, revolving on a vertical axis, on a finger beam hinged to the main frame by three joints, substantially as described.

74,846.—Self-acting Bolt.—Thomas Rattenbury, Detroit,

Mich.
I claim, 1st, The projection or thumb piece, C, working in the slot, E, by which the closing of the second door compels the bott, B, to act.
2d, The combination of the above described parts with the frame, A, the spring, D, and the stem, F, when constructed to act automatically, substantially as described.

74,847.—Harvester.—James H. Redfield and Walter J.

74,847.—HARVESTER.—James H. Redfield and Walter J. Cox, Salem, Ind.
We claim, 1st, The cutter bar, 1, provided with the curved teeth, h, having their concave edges forming the cutters, in combmation with the crank pulleys, 1, upon the vertical shafts, k, gears, 1, shafts, m m', bevel gears, n, shaft, o, pimon, p, and gear wheel, E, upon the axle, D, all arranged to operate as herem described, for the purpose specified.
2d, The endless bands, q, when provided with the springs, bx, in combination with the gavel receiver. Ix, pinion, u, curved segment, w, shaft, wx, and crank, ax, all arranged and operating as described, for the purpose specified.
3d, The application of springs or elastic plates, bx, to the endless bands, q for the purpose of discharging the cut grain into the grain receptacle, substantially asset forth.
4th, The pendant plate, I, when provided with the curved slots, f, in combination with the set screw, e, frame. H, and bar, A, all arranged and operating as d scribed, for the purpose specified.

74,848.—Boot Crimping Machine.—C. H. Rice, Port Henry, N.Y.
I claim the rotary boot trees, C.in combination with the jaws or pressure lastes, D'D'D'DxDxx Dxxx, all being constructed and arranged to operate in the manner substantially as and for the purpose set forth.

74,849.—CAR VENTILATOR.—David C. Richardson, Lawrence,

Mass.
I claim the combination and arrangement of the self-adjusting folders, de, connected by the rod, j, in the open-mouthed space between the weather plainer, be, with the register plates, pp, substantially as and for the purposes herein set fortb. 74.850.—Screw Cap for Oil Cans.—William Rigg, London,

ofinserting the oversole, E, and securing it for wear, so that it can be sprung in or out, substantially as and for the purposes herain set forth.

of the string to version, and seeming from wear, so what it can be spiring in or out, substantially as and for the purposes herein set forth.

74,852.—GO ERNOR.—Ephraim P. Pogers (assignor to himself, R. W. Payne, and Hiram l'intohard), Corning, N. Y.

I claim the governor constructed as described, and consisting of the hollow slotted disk, A, having tubular stem, B, and neck, n, the weight, K, provided with stem, m, valve stem, C, swive; joic., f, cross for, F, connections, G, levers, E, and balls, D, all arranged and operating as set forth.

74,853.—CARD SETTING MACHINE.—James Russell, Springfield, Mass.

74,855.—CARD SETTING MACHINE.—ABIGS RUSSEII, Spring-field, Mass.
I claim, 1st, A reversible stop ring, A, with its flanges, b b, its slots, c c, and its rolls, d d, and groove, a, constructed as herein described and for the purposes specified.
2d, In combination with the above, a pin or plunger, I, worked by the cam K, as and for the purposes described.

K, as and for the purpose described.
74.854.—BEEHIVE.—P. J. Severson, Knowersville, N. Y.
I claim, 1st, Separators, E, when constructed with top bar. G, and pins, H substanti lly gs and for the nurposedescribed.
2d, The double comb frames, D, in combination with spaces, ss's', and separators, E, substantially as hereinsetforth.
3d, Surplus honey box. B, with its cap or cover. C, and double comb frames as herein described.

as herem described. 74.855.—Pan Lifter.—Morrill A. Shepard, Bridgeport, Ill. I claim a pan litter consisting of the members, A a a B C and D, the whole being arranged and operating substantially as herein described and for the purpose set forth.

purpose set forth. 74,856.—Dumping Wagon.--Henry Shirey, Fond du Lac,

Wis.
I claim. 1st, The revolving supporters, ddddd, cams, f, bar, g, lever, h, ful-rum, k, andbrace, i, constructed substantially as described and operating sect forth. asset forth.

2d, The bottom boards, b b, loops, c c, in combination with a body or wagon bed, when constructed and operating substantially in the manner and for the purposes set forth.

74,857.—Oyster Dredging Machinery.—Thomas P. Sink,

Fairton, N., assignor to himself and J. F. Trenchard, Philadelphia, Pa. I claim, let. The twe rollers. F, and G, arranged en the deek or sunwaie of the vessel, for the boarding and tilting of the dredger, substantially as deceribed.

2d. The combination described of the rollers, F and G, with the hinged ar W -Boot and Shoe .-- George Smith and Godfrey Smith,

New York city.
We claim the or amenting of boots and shoes by stitching a piece of learning of the constraint of the inner side of the upper in such a manning as to form pockets or grooves between the upper and the inner material, to inclose cords of any suitable material, by which promirences are given the outer or external surface of the upper, substantially as shown and described.
74,859.—Pocket for Billet Strap.—Henry H. Smith, Wilming a piece of the upper, substantially as shown and described.

74,509.—TOCKET FOR BILLET STRAY.—Henry H. Smith, Wilmington, Del.
I claim a pocket, E, of metal or its equivalent, and at the lower edge o which is a perforated flange, for the purpose specified.
74,860.—CAR BRAKE.—W. H. Smith and Joseph Steger, New York city.
We claim the combination of the spring. K, cams, I I', constructed as described, ropes or chains, h, and pulleys, g, substantially as and for the purposes described.
74,861.—CTADYER HARVESTER.—S. L. Stockstill and W.H. H. Scenff Medway Oblo.

74.861.—Chover Harvester.—S. L. Stockstill and W.H. H. Scarff, Mcdway, Ohio.
We claim, ist, The suspended bed, C. in combination with the thills, J. J. attached to the axie, A, and the shaft, L. placed on the thills. with the segment, M, on said shaft, the Arm, O, hand lever, P, and pawl, Q. all arranged substantially as and for the Durpose set forth.

2d. The comb teeth D, attached to the front end of the bottom, a, of the bed, in combination with the reciprocasing bar G, operated substantially as shown and described, and provided with knives I i. which are provided with pendant pins m, 10 work in zigzag slots n, in one or more of the teeth D, of the comb, to give said knives a reciprocating motion as set forth.

74,862.—Street Pavement,—Henry M. Stow, San Francisco, Cal.
I claim a pavement composed of tiers of wedge-shaped wooden blocks, driven into a foundation bed of sand or earth, with spaces between said tiers packed with gravel, or sand and gravel, substantially as shown and described.

74,863.—Lamp.—Alvin Taplin, Somerville, Mass. I claim my improved lamp burner, constructed with the annulus E to screw into the neck or cap of the oil reservoir D, and with the body A, connected with the annulus by a hinge only, the whole being in order that the body, by means of the hinge and the annulus, may be connected with the reservoir or its cap, in manner as specified, and the body be movable, relatively to such annulus, substantially as and for the purpose set forth.

74,864.—Bread And Vegetable Cutter.—Hiram A. Titus,

Gloversville, N.Y.

Gloversville, N.Y.

I claim arranging the plates B and D, in combination with the lever F, and minfe E, all made and operating so that the knife will receive a slanting moion and the required pressure, substantially as set forth.

-Crib Attachment for Bedsteads.—Harriet Ruth 74,865.—URIB ATTACHMENT FOR BEDSTEADS.—Harriet Ruth Tracy, New York city.

I claim the besistead when cut a way in the center of its side to receive the crib E, sliding beneath the bars c, and between the transverse guide hars D, attached to the frame of the bedstead, the front end board of said crib en larged to overlap the cut portaonof the side of the bedstead, as herein set forth for the purpose specified.

74,866.—SKATE.—Levi B. Tyng, Lowell, Mass.
I claim the combination and arrangement of the grooved stands c c, slots d, screws or bins n, springseatee, and springs of, substantially as and for the purpose herein specified.

74,867.—ENVELOPE.—Sigmund Ullman, New York city.
I claim, 1st, The envelope formed with the end flanges or flaps FF, and the folded and interlocking edges m m, substantially as and for the purpose specified.

specified. 2d. The combination of the eyelets nn, and stamped or printed impressions v, around them, when constructed and employed substantially as and for

purpose specified. 858.—Trip Hammer.—Charles Vogel, New York city.

74.898.—TRIP HAMMER.—Charles Vogel, New York city. I claim, 1st, The bars or rods Q secured to the cross head P, of the hammer stem C, when said rods are attached to the angular arms B, upon the front end of the heam S, as herein shown and described.

2d, The block U, provided with the cam-shaped end X, when adjusted upon the beam S, by means of the slots V, and screw bolts W, as herein described for the purpose specified.

3d. The arrangement of the sliding pulley A4, or its equivalent, with the block U, and with the operating beam of the hammer, substantially as described for the purpose specified.

4th. The tightener frame A5. bearing in one end the driving pulley B5, arranged with the connecting rod C5, curved treade D5, and spring K5 as herein described for the purpose specified.

74.899.—PEPPER CASTER BOTTLE.—Edward Wattis, Sr., Philadelphia, Pa.

I claim the pepper caster bottle, having a slide C, inits flat bottom, enalling the latter to be formed at the extreme lower end of the bottle, and increasing the capacity of the same, as herein shown and described.

74.870.—DRILL AND COUNTERSINK.—P. A. Whitney, Woodstock, Vt.

74,870.—DRILL AND COUNTERSINK.—r. A. Whithey, Woodstock, Vt.
I claim, ist, An adjustable tool for the drilling and countersinking holes, composed of the countersmk, e, in two parts, and a drill D, between the same, adjusted by a key or its cquivalent, held between the segment A and B of my chuck, by being acrewed into a socket C, substantially as shown and described and for the purposes set forth.

2d. A chuck formed in segments, having two splines or channels, a and a, of different depths, in combination with any countersmk, e, and drill D, substantially as shown and described, and for the purposes set forth.

74,871.—Cosmetic.—I. M. Wilson, Seguin, Texas.

I claim the composition of a cosmetic, substantially as herein described.

I claim the composition of a cosmetic, substantially as herein described. 74,872.—Spring Bed Bottom.—E. E. Worden and H. Wilms,

stanually as and for the purposes specified.

4th, in connection with receptacles b, a conductor i, substantially as described and shown.

5th, Combining with tank C, provided with fixed receptacles b b, a removable receptacle, substantially as described and shown.

6th, The removable receptacle, formed to fit vessels of various sizes by its outward fiare, and provided with the interior rim g g, substantially as and for the purposes specified.

74,874 — STRIPPER FOR CARDING CYLINDERS.—Fletcher M. Abbott, Boston, Mass., and Edward F. Flelds, Lewiston. Me. We claim the mechanism, constructed and operating substantially as described, for moving and regulating the "stripper," as and for the purpose set

forth.

Also, in combination with a "stripper," supported in a sliding bearing, a feed connecting and disconnecting mechanism, substantially as described and for the purpose set forth.

74,875.—APPARATUS FOR EVAPORATING SORGHUM JUICE AND OTHER LIQUIDS,—Hiram B. A very, Bethel Township, Mich.
I claim the cyaporator B, in combination with the steam chest A, when said chest is furnished with pipes, e g h and m, substantially as set forth. 74.876.—Sofa Cradle.—Henry A. Axtell, Westfield, Mass.

I clam the combination of the swinging sofa cradle C, with the device for converting the cradle into a sofa, consisting of the adjust the screws, a, and hinge E, constructed and arranged substantially as described.

74,80.—SCREW CAP FOR OIL CANS.—William Rigg, London, England. Patented in England Feb.6, 1867.

I claim, ist. The screw cap for oil cans struck up from one piece of metal. I claim, ist. The screw cap for oil cans struck up from one piece of metal. I claim to the struck up shown and described. To combination of the faucet having a cutter upon it screw-threaded end, with the struck-up metallic cap and scal, sunstantially as adescribed. To combination of the faucet having a cutter upon it screw-threaded end, with the struck-up metallic cap and scal, sunstantially as adescribed. To combination with the slotted class and thumbscrew D, substantially as and for the purjose herein set forh. The purpose specified.

74,878.—CLEANING CLOTHS USED BY BANK NOTE ENGRAV-ERS.—HaydnM. Baker, New York city.

1 claim the vise of coal tar, benzine. coal-tar napths, or refined coal-tar light oils, forremoving printers ink from cloths or other fiber used by bank to the and other engravers.

Also, the separation and recovery of the printers' ink and solvent by distillation, or any other method substantially the same.

74,879.—PLANT PROTECTOR.—Robert M. Bartlett, Storrs

Township, Ohio.
I claim, let, A plant protector, consisting of the following devices, to with hood A, of any suitable shape, when used in connection with the pole B and suspending cord F, the whole being arranged and operating substantial ly as herein described and for the purpose set forth.
2d, Iu combination with the clements A a a a a, C C C, B, and F, the ventilator D, and cap E e e e, and for the purpose explained.
3d, The conical hood A, having one or more lighted openings or "bull'seyes" C, And adapted for suspension to a stack or pole, in the manner substantially as set forth.

-Apparatus for Bending Metallic Plates.—John

W. Bean, Henry, Ill.
I claim the improved apparatus for bending and tempering plow and similar plates, when constructed and arranged in its several parts substantially as described.

74,881.—Soldering Iron.—Theodore Beardsley, Springfield Mass., assignor to himself and J. Dana Wyman, Fitchburg, Mass: I claim, ist, A soldering iron, in which the point is heated by a flame fed by reservoir of fluid contained in the handle of the instrument.

2d, The combination of the valve H, reservoir B, and head C, substantially is and for the purpose set forth.

2d, The combination of the valve H, reservoir B, and head C, substantially as and for the purpose set forth.

74,882.—RAILROAD CHAIR.—L. B. Bidwell, Hartford, Conn. I claim an improved railroadchair, constructed of plate from with a portion of the sides turned up at right angles to the bottom, in such a manner as to leave the bearing ends of the same width as the original plate, and to have the turned up portion curved out to the edges of the bearing ends, to increase their stiffness, substantially as specified.

74,883.—Boiler Feed Low Water Detectron.—Joseph N. B. Bond, New York city.

I claim, 1st, The buckling tube B, operating the alarm whistle F, by means of the arms D f, and connected with the boiler A, as shown, when arranged and operating as berein set forth and shown.

2d, The float H, operating the valvel, in the conical nozzle of the supply pipe 1, which is provided with the nozzle n, and check valve o, in combination with the pipes h p, steam cock 1, and bnckling tube B, substantially as and for the purposes described.

74,884.—Bellows.—John Bowden 'and Walter Bowden, Bushwick, N. Y.

74,884.—Bellows.—John Bowden and Walter Bowden, Bushwick, N.Y.
We claim, ist, The arrangement and combination of the valves c\*, s\*, i, m, and e, relatively to and with the forcing chambers C and B, and air chamber A, substantially as set forth.

2d, The cover a, of the air chamber A, connected therewith by an annular, flexible disphragm, arranged for operation in connection with the forcing chambers B and C, subst nitially as specified.

3d, The arrangement of the side slots f\*, between the fixed and yielding covers of the air chamber A, for admission of air to the forcing chamber B, through valves, substantially as shown and described.

74,885.—Plow.—Jeremy Bradley, Owatonna, Minn.
Iclaim the combination and arrangement of the plow A, standard B, and clasp C. in the manner and for the purposes herein specified.

74,886.—Animal Trap.—A. C. Briant, Lafayette, Ind.
I claim the combination of the box A, with its partition B, shaft H, having platforms I and J, inserted directly into said shaft Goor K, above platform J, and operated by the rod G, and cord F, all constructed and used substantially as specified.

ly as specined.

74,887.—Animal Trap.—Manlove Butler, Vernon, Ind.

I claim an animal trap constructed with the parts A A', B. C, and D, arranged as described, the oscillating wheel D being constructed with one loaded wing D', so as to act by gravity only, substantially in the manner set

74,888.—Breech-loading Firearms.—Cornelius Callaghon,

74,888.—BREECH-LOADING I IREARMS.—COINGING SCALAGE INC., Great Britain.

I claim the combination with central rib, substantially such as described, of two breech-blocks swinging outwardly therefrom.

Also, the combination with a removable frame of the breech blocks, substantially as described, so that when the frame is removed from the stock and the blocks released from the rib, the blocks are free to be removed from the frame, substantially as described.

74,889.—ANIMAL TRAP.—Charles R. Capps, Illiopolis, Ind. I claim the combination of the dwk A, sections b bi by 38 bd, platforms k it & 38 kd, with their studs and springs, as shown, projection o, spiral spring d, casing h, and cage R. of an animal trap, as and for the parpose specified. 74,890.—Boot and Shoe Last.—Charles F. Carr and Gilbert

F. Holbrook, Norwich, N. Y.
We claim the sliding boit, b, operated on as described and shown and for
the purposes as substantially set forth,
74.891.—TIP SLED.—Stephen Chamberlin, Boston, Mass.

74.891.—TIP SLED.—Stephen Chamberlin, Boston, Mass. I claim, in combination with the sied runners, a body so mounted as to tip, substantially as described.
74.892.—HORSESHOE.—George T. Chapman, New York city. I claim, ist, The continuous detachable calk, B, combined with the part, A, snbs tantially as described.
21. The continuous detachable calk, B, and pin, C, in combination with the part, A, substantially as described.
74.893.—GRAIN DRYER.—Lewis S. Chichester (assignor to himself, G. H. Nichols and C, W. Mills), Brooklyn, N. Y. I claim, 1st, The verticel air flue, a, in combination with the deflectors, e, latiorms, c, and gram tables, platforms, or hoppers, substantially as and for the purposes set forth.
2d, The sections, g, having hopper.shaped openings and placed together, substantially as and for the purposes set forth.
74.894.—CARRIAGE JACK.—Olney Churchill, Canton, Pa.
21 claim a lever jack, when constructed and operating substantially as shown and described.

-Combined Manure Fork and Hook.—C. C. Cole (4,999.—COMBINED MANURE FORK AND FIOOK.—C. C. Cole Phelps, N. Y. I claim the special construction and arrangement of the divided socket C, provided with the corrugations or grooves, be, the spring pawl, l, and the circular bearing, B, the whole combined with the changeable fork head A, and scraper, G, and operating in the manner and for the purpose herein let forth.

the circular bearing, B, the whole combined with the changeable fork head, A, and scraper, G, and operating in the manner and for the purpose herein set forth.

74,896.—VALVE FOR WATER CLOSET.—William S. Cooper. Philadelphia, Pa.

I claim a water closet valve comprising hollow piece, B, annular space, A, and holes, K' and E and h, all constructed and operated in the manner and for the purpose above set forth and described.

74,897.—SNAP HOOK.—J. C. Covert, Newark, N. J.

I claim, as an article of manufacture, providing the shank of the snap hook with a groove into which is dropped the sliding bolt, D, and loose spring, e, said troove being covered by means of the plate, G, and the bridge. I which conceal, keep in place, and protect the spring and bolt, one end of the shank being so formed that it can be pivoted to a hold-back, when the several parts are constructed and arranged as and for the purpose set forth.

74,898.—APPARATUS FOR BLEACHING WITH SULPHUR FUMES.

—A. J. Crosby and O. W. Crow, Bluffton, Ind.

We claim the box, A, with the doors, B, vessel, C, having a regulating slide. D, and the bars, E E, the whole combined, arranged and used in the manner and for the purposes specified.

74,899.—APPARATUSFOR HEATING AND VENTILATING RAIL—way CARS.—D. H. Dotterer, Philadelphis, Pa.

I claim the within-described combination of furnace, boiler, air-heating chamber, and engine with the fan blower, or equivalent device, whereby a forcible current of heated or cold air is created and maintained through pipes which convey the air to and distribute it within the severalcars of a railroad train, substantially in the manner described.

74,900.—Ralikoad Rail Joint Spilce.—Edmund H. Eberman, Lampeter Square, Pa.

I claim the construction of the flanged and double dove-tailed brace and filling or pluxs, B B b b' used jointly or severally, in combination with the boil, C, and nut, D, and dove-tailed slot, a, cut in the rail, all arranged in the manner shown for the purpose specified.

manner shown for the purpose specified.

74,901.—Shoe Tip.—Alfred B. Eiy, Newton, Mass.
I claim the use of resinous bodies combined with fibrous material and shaped by means of heat and pressure, substantially as described.

Also a shoet ip made of the foregoing substances and formed into shape by means of suitable pressure with or without heat, substantially as described.

Also a shoetip made offelted or woven material saturated with resinous substances or prepared rubber which when properly heated and pressed in substances or prepared rubber which when properly heated and pressed in molds will assume the proper shape and acquire and possess the proper hardness and elasticity, substantially as described. 74,902.—WASHING MACHINE.—Levi S. Enos, Almond, N. Y.

the pounders, D. D. as constructed and arranged for receiving J. in combination with the inction rollers, a a, vertical stationar having series of holes, ilii, and corrugated hinged lid or cover utially as and for the purposes herein eet forth.

weights, J.J., in combination with the first order and arranged for receiving board, G, having series of holes, it it, and corrugated hinged lid or cover, A, substantially as and tor the purposes herein eet forth.

74,903.—WATER WHEEL.—F. R. Ferris, Dora, Ind.

I claim the collar, H, in combination with the collar, E, arms, G, and gates, L L, the same being used substantially as and for the purpose set forth.

74,904.—Toy Pistol.—Russel Frisbie, Cromwell, Conn., assignor to J, and E. Stevens & Co.

I claim the toy gul having its barrel provided with an orifice or vent, a arranged in relation with the piston, C, to operate substantially as and for the purpose specified.

-ELECTRO MEDICAL BATTERY.—Herman Fritz, Cleve-

74,905.—ELECTRO MEDICAL BATTERY.—Herman Fritz, Cleveland, Ohlo.

I claim, 1st, The battery case, when constructed in sections, A B, in the manner as and for the purpose substantially as set forth.

2d, The special manner of voluneting the porous cups to the caps of cylinders by means of the shonider, c', metallic serew collar or rim, c, and cap, S, in the manner substantially as described.

3d, The arrangement of the helices, T T', surrounding the cylinders, D E, and inclosing circular magnets, N, when said magnets are so arranged that they may be raised or lowered within said helices by an adjusting screw, x, for the purpose and in the manner described.

4th, A case, constructed of metal or of any other suitable material inclosing the prime and induction coils, T T' and m' m', tor the purpose specified 5th, The foot plates, B', provided with the heel, R', and adjustable toe cap, C', las arranged in combination with the battery case, in the manner as and for the purpose set forth.

William I. Every (accirport to him.)

STOVE HEARTH.—William I. Fryer (assignor to him-

self and John P. Whitbeck), West Troy, N. Y.

I claim the open hearth plate, C, projecting from and externally to the frebox of the stove formed with flanges and slides so as to carry in combination
with it the sh pan or drawer. D, and replacing pan, H. as described.

74,907.—MANUFACTURE OF SOLID STEEL KNIVES.—J. W.
Gardner, Shelburne Falls, Mass.

I claim a solid wrought-steel knife or fork with a skeleton or open handle
and formed out of one piece of metal, substantially as described.

74,908.—Fence.—Melvin J. Gaskill, Pleasant Plain, Ohio. I claim the holding of the wires firmly in their places upon the battens by means of clinches turned upon the ends of the wires and driven into the battens, substantially as set forth and tor the purposes specified.

74 909.—Tree for Side Saddle.—Joseph B. Gathright,

Louisville, Ky.

Louisville, Ky.

I claim, as an article of manutacture, a tree for a side saddle combining in its construction the following elements, viz: the bars, A A', flattened cantel, B, extension, D D', leather base, E, and block, F, sad parts being respective constructed and arranged in relation to the other parts of the tree, as herein described.

74,910.—Folding Chair.—H. S. Golightly and C. S. Twitch-

74,910.—FOLDING CHAIR.—H. S. Golightly and C. S. Twitchell, New Haven, Conn.
We claim, 1st, A cross-legged folding chair in which the back is hung upon plvots, or in an equivalent manner, so that it may move or swing independently of the seat and frame to adjust itself to the back of the person occupying the chair, substantially as herein shown and described.
2d, The combination with the back legs and the seat, whether rigid or flexible, of a folding chair of the iront legs and a back pivoted or huns between the ends of said legs which extend above the seat so as to swing or move independently of the seat and legs, substantially in the manner and for the purposes herein shown and specified.
74,911.—COUNTING ATTACHMENT FOR THREAD-WINDING MACHINE.—William Grover, Holyoke, Mass.
I claim, 1st, A releasing plate or tripper in combination with the spool-removing mechanism of a thread-winding machine, as and for the purpose set forth.
2d, The cottched adjustable plate, b, secured to the vibrating arm in combination.

set forth.

2d. The notched adjustable plate, b, secured to the vibrating arm in combination with the traversing stud, a, substantially as described,

3d. The vibrating arm, b', supporting the pawl, c, springs, e and e1, and notched plate, b, in combination with the revolving dial plate, detent, m, and tension spring, q2, substantially as set forth.

4th, The combination of the adjustable stops, s, and pin, q, with the revolving dial plate or a revolving index, arranged and operating substantially as and for the purpose specified,

74.912.—INSOLE FOR BOOTS AND SHOES.—Artemus N. Had
lev. Buldwood Library and the stop of the purpose of the stop o

74.912.—INSOLE FOR BOOTS AND SHOES.—RITCHING I. ALL ley. Richmord, Ind.
I claim, 1st, The provision of the spur piece or counter, B, at the rear edge of an elasticinsole, substantially as and for the purpose set forth.
2d, The combination of the sole piece, A, spur or counter, B, and protuberances, C, as and for the purpose set torth.
74.913.—RATTAN MACHINE.—Levi Heywood, Gardner, Mass. I claim a central tube or "quill" provided with slots or openings in combination with a series of adjustable cutters, B, substantially as and for the purpose set forth. purpose set forth. 74,914.—Gearing for Lamp Train.—Robert Hitchcock and

74,914.—GEARING FOR LAMP 'IRAIN.—Hobert Hitchcock and George A. Jones, New York city.

We claim, 1st, A gear wheel constructed of hard rubber or similar material possessing sufficient hardness with elasticity for gearing, for the purposes set forth.

2d. The combination of gear wheels made of hard rubber or other material uniting like hardness and elasticity, with metallic gearing in mechanical movements, for the purposes set forth.

3d. The combination in mechanical trains for supplying air to lamps of the hard rubber gear, c, with the fan-wheel screw shall, substantially as and for the purposes set forth.

74,915.—GATE LATCH.—Simon Ingersoll, Mianus, Conn., assignor by mesne assignments to himself and Job Johnson.

74,915.—(fATE LATCH.—Simon Ingersoil, Mianus, Conn., assignor by mesne assignments to himself and Job Johnson.

I claim the gate latch, ct.c2. suspended by the two fulcrum pins, bi b2, and moving between theplates, D and E, substantially in the manner and for the purposes set forth.

74,916.—STRAP HOLDER.—George B. Kirkham, N. Y. city. I claim the body of the holder as adapted with the slide, the bent wire, b, and chain, c, at one end and as adapted with the catch and spring at the other end, all as herein described.

74,917.—Folding Cradite.—Charles Klein, Albany, N. Y. I claim the sections, BB, bottom, C, rockers, AA, and end pieces, DD, when the se veral parts are hinged tegether, as specified for the purposes set forth.

74,918.—Tweer.—Hugh Laird, Mechanicsburg, Pa.
I claim the combination of air chamber, A, valve recess, G, valve, H, plug, C, and lever, D, arranged substantially as described.
74,919.—Washing Machine.—Alford Lamb, Jeffersonville, N. Y., assignor to bimself, William H, Morse and Mary E, Layman. I claim the auxiliary spring bottom, B, india-rubber strip, C, and fluted roller. D, all arranged substantially as and for the purpose described.
74,920.—Rocking Chair.—James Lamb, Hubbardstown,

Mass.
I claim the arrangement as well as the combination of the middle or zigzag and the side or leaf springs with the chair seat and base, substantially as described the whole being to operate as explained.
74,921.—HARNESS PAD PRESS.—G. W. Lawbaugh, Geneseo,

74,921.—ITARNESS 1 as I also I ll.

It claim the combination of the bottom plate, A, stirrup, C, screws, dd, top plate, B, and screw, F, constructed and arranged in the manner hersin as shown and described, and for the purpose set forth.

74,922.—HORSE RAKE.—Ellis Luther, West Troy, N. Y. I claim, Ist, The block, G, and cradle, P, in combination with each other and with the head of the rake, substantially as herelubefore described and set forth.

and with the head of the rake, substantially as hereiubefore described and set forth.

2d, The combination of the dog, b, and the hook, c, with the crade, P, substantially as hereinbefore described and set forth.

3d, The combination of the spring, d, with the hook, c, substantially as herein specified and set forth.

4th, The combination of the arm, N, with the cradle, P, and the lever, J, substantially as herein specified and set forth.

5th, The combination of the crad, T, with the dog, b, and axle, A, substantially as herein specified and described.

6th. The lever, J, the arm, N, the cradle, P, the hook, c, the hooked lever, a, and the spring, d, all arranged and combined substantially as and for the purposes hereinbefore exercibed and set forth.

7th, The combination of the cradle, P, with the chain, o, substantially as hereinbefore stated and set forth.

74 092 — MACHINE FOR SHEARING YARN.—Caroline L. Lut-

nereinoetore stated and set forth.

74,923.—MACHINE FOR SHEARING YARN.—Caroline L. Lutton, Philadelphia, Pa., administratrix of the estate of E. T. C. Lutton, de-

ceased.
I claim, ist, The combination of the revolving blades, h, the snife, D, and a plate or projection, m, between which and the knife the yarn is caused to tay the snife that the combination of the above with the guiding plate, E, and revolving 74.924

-Horse Rake.-William McCord, Sing Sing, N. Y. Antedated Feb. 14, 1889.

Antedated Heb. 14, 1889.

I claim the radius arm, c, made adjustable on the rake head, C, and operating in combination with said rake head, substantially as and for the purpose set forth. 74,925.—Spring for Relay Magnet.—William N.McInnis,

4,926.—SPRING FOR IDEAS AMERICAN
NORTHMENIAN PA.
I claim the construction of the irregularly and loosely coiled steel spring,
, when attached to and combined with the winding axie, B, and the armaure, G, as herein described and for the purposes set forth.

74,926.—RAILWAY SWITCH STAND.—Alexander McLeod, Cov-

ington, Ky.

I olaim the arrangement of stand, AA', a a', target, CC'. switch bar, D, ever, E, shot bolt, F, if', pedal, H, and spring, G, or weight, J, as and for the purpose set forth.

I claim the arrangement of game, A.A., a a, value, or weight, J. as and for the purpose set forth.

74.927.—STARTING CARS.—John McMurtry, Lexington, Ky.
I claim, 1st, The beam, c. when provided with slots, d. d. and rack, b, operating substantially as and for the purpose set forth.

2d, The disk, J., provided with pins, s., in combination with beam, c. substantially as described.

3d, The spring, c. in combination with pins, t, and beam, c, operating substantially as specified.

4th, The cog wheel, H, and double acting pawl, q, in combination with disk, J. arran ed substantially as set forth.

5th, The friction wheel, I, and pin bas, n, in combination with beam, c, operating substantially as set forth.

6th, The brake, g, provided with a slot and spring, m, in combination with friction wheels, I, and pin bas, n, in combination with friction wheels, I, and pin bas, n, in combination with friction wheels, I, and pin bas, n, in combination with friction wheels, I, and pin lons, n, as and for the purpose specified.

74.925.—CORN HARVESTER.—Q. F. Mcssinger, Easton, Pa. I claim, 1st, The rotating wheel, K, with its pins, I, in combination with the cutters, the bar, L, or its equivalent, and with a platform, so connected to the rear of the machine as to be adjustable laterally for the parpose described.

2d, The platform, R, consisting of a series of plates, n, in combination with the devices herein described, or the equivalent of the same for operating the said plates, all substantially as and for the purpose specified.

3d, The arrangement of the bent bar, M, and the wheel, K, asand for the purpose set forth.

74,929.—HARVESTER RAKE.—Lewis Miller, Akron, Ohio. Iclaim the combination of two revolving telescopic arms, turning upon a center arranged on the platform at a, one of which carries a fork or rake, and is caused toslide on the other by means of a roller or guide traversing a camp path or way. D, formed by two ratsed marginal ledges, c, c, also on the platform, and surrounding the center, a, substantially as and for the purpose described.

74,930.—STEAM GENERATOR.—Marcus Neumann, New York city, Valdemar F. Lassoe, Brooklyn, and C.W. Mac Cord, New York city. We claim, 1st, A steam generator, provided or fitted with vessels.L, forming flue emlargements, arranged one above the other, and containing draft defic ctors.M, in combination with water courses or generator dividing plates, K, situated below the vessel, L, and having escape outlets or openings, I, in such manner as that water in letted on to said vessels, or the upper one thereof, is converted into steam in its passage over them and the dividing plates, by the cetour given to the smoke and heated gases beneath and over the effectors, substantially as specified.

2d, The combination of a sprinkler or feed water distributor, t, with the fine enlargements or vessels. L. containing deflectors, M, and water courses or generator-dividing plates, K, provided with escape outlets, 1, for operation together as herein set forth.

3d, The combination, with the superheater, F, and arch, E, of the fire-box or chamber, of the cold air passage, f, arranged to communicate with the main or central flue, and controlled or supplied by suitable lules from the oniside, essentially as described.

4th, The feed water heater, N, arranged essentially as specified, and fitted with one or more flue-enlargements or vessels, L, containing deflectors, M, for operation in combination with a feed water sprinkler, s, or distributor, as herein set for the combination with a steam generator and separate heater, the auto-fith, in combination with a steam generator and separate heater, the auto-fith, in combination with a steam generator and separate heater, the auto-fith, in combination with a steam generator and separate heater, the auto-fith, in combination with a steam generator and separate heater, the auto-fith, in combination with a steam generator and separate heater, the auto-fith, in combination with a feed water sprinkler, s, or distributor, as herein set for the second separate and separate heater, the auto-fith, in 74,930.—Steam Generator.—Marcus Neumann, New York

In combination with a steam generator and separate heater, the auto made pressure regulator, interposed between the generator and superheat er, and operating to supply the latter with steam on the pressure in the gen erator exceeding that in the superheater, as herein set forth.

74,931.—Combination of Life-Preserving and Swimming APPARATUS.—Halvor Olsen, San Francisco, Cai.
I claim the combined use and application of the floats, and the extended

ribbed and webbed gloves and sandels, constructed and attached to the user in the manner and for the purpose herein described and represented.

74,932.—BALLOT BOX.—Jesse P. Outcalt, Lancaster, Ohio. I claim, ist, The double spiral bopper, by which the balls are kept separate and conveyed to the tumblers in the manner described.

2d, The crescent, shaped tumblers, by means of which the balls are taken separately from the hopper and deposited in the drawer, as set forth.

3d, The spring, H, in combination with the slide, and tumbler for retracting the same, as set forth.

range the same, as set forth.

74,933. — Mosketo Canopy. — Isaac E. Palmer, Hackensack, N.J.

1 claim the operating cord and holding stem, secured to the braces, D, and arranged to work through the tubular socket, A, of the ribs, B, whereby she canopy may be expanded from the exterior thereof, substantially as herein shown and described. 74,934.—Horse Hay Fork.—Nelson Palmer, Albany, N. Y.

I claim, 1st, The combination of the tines, a and a', the braces, d and d', and he handle, b, when constructed and arranged substantially as and for the purpose set forth.

the handle, b, when constructed and arranged substantially as and for the purpose set forth.

2d, The combination of the tines, a and a', and braces, d and d', the handle, h, the catch, g, and the roller, i, when constructed and arranged substantially as and for the purpose set forth.

3d, The catch, g, constructed and pivoted as described, so as to be locked by the action of the roller, i, against the catch, g, below its pivot, substantially as each led.

4th, The roller, i, constructed as described, in combination with a catch substantially as and for the purpose set forth.

74.935.—PROCESS OF SEPARATING COLORING MATTER FROM MADDER AND OTHER PLANTS.—Alfred Paraf, Boston, Mass.

I claim the compound process of liberating the coloring matter of plants from the ligneous matter by the solution of the cellulose, and the separation of the coloring matter from the insoluble compounds formed during the said solution, substantially as before set forth.

Also, the compound process of liberating the coloring matter of plants from the sugary and ligneous matters thereof by the removal of the sugar matter, substantially as before set forth.

74,936.—COMBINED BOILER AND HOT-AIR REGISTER.—B. B.

matter, the solution of the centitoset, and me separation of the coloring matter, substantially as before set forth.

74,936.—COMBINED BOILER AND HOT-AIR REGISTER.—B. B. Perkins, Chestertown Md.

Iclaim, in connection with a holler, arranged at the top or side of hotair flues in houses, the combination and arrangement of the perforated botler top with the perforated cover, F, plvoted at i, the connecting rod, H, and the register, B, when the partereferred to are constructed and arranged substantially in the manner and for the purposes set forth.

74,937.—COFFEE-MAKING APPARATUS.—Julius Petsch, Hanover, Prussia, and Stephen N. Buynltzky, St. Petersburg, Russia.

We claim, 1st, A coffee-making apparatus, constructed with the shell, A, partition, B, strainer, D, and tube, C, or the equivalent of these parts, to operate in the manner set forth, and provided with the minute vent holes, c through the partition. B, substantially as and for the purpose set forth.

2d. The coffee-making apparatus, constructed with a shell, A, partition, B, strainer, D, and tube, C, or the equivalent of these parts, in combination with the stand, E, or its equivalent, to support the said apparatus upon trunnions, as and to the effect set forth.

3d. The coffee-making apparatus, as set forth in the next preceding estable.

lons, as and to the effect set forth.

3d. The coffee making apparatus, as set forth in the next preceding claim, n combination wih a device to extinguish the heating flame, substantially

as setforth.

4th, The signal bell, n,in connection with and operated by the coffee-making apparatus set forth in the second preceding claim, substantially as described. 74,938.—Loom.—William J. Quinn (assignor to Furbush &

74.938.—Loom.—William J. Quinn (assignor to Furbush & Gage), Philadelphia, Pa.

I claim 1st, The combination, with a drop-box, of a series of self-adjusting plates or cross pieces, ool, o2, whereby the threads of the shuttles above that in operation are held above the fingers of the weft fork, substantially as and for the purpose described.

2d, The weft fork, provided with a recess, x, formed between the rod, m, and fineers, n. as as for the purpose specified.

74.939.—CAR WHEEL.—John Raddim, Lynn, Mass.

I claim, in combination with the web, a, the sectional hub, c.c., and the bolts, g, constructed and arranged as shown and described, the elastic packing, h, and the bolts, substantially as and for the purpose set forth.

leg, h., and the bolts, substantially as and for the purpose set forth.
74,940.—MEDICAL COMPOUND OR BITTERS.—G. V. Rambaut,
Petersburg Va

74,940.—Medical Compound or Bitters.—G. V. Rambaut, Petersburg, Va.

Iclaim the compound made of the materials and substantially as herein described and for the purpose set forth.

74,941.—Churn.—John B. Raynor, Mazo Manie, Wis.

Iclaim the shaft, C, provided with a series of straightarms, H. H, when arranged in combination with the box, B, having a series of rods. II, in the manner and for the purposes set forth.

74,942.—Machine For Grinding Reaper Knives.—Chas. Richardson, Auburn, N. Y.

I claim 1st, Making the top piece of the swing-frame, H, to which the cutter is fastened when the knives are to be ground, adjustable, and using the same in combination with the adjustable grindstone, in the manner and for the purpose substantially as described.

2d, Affixing the water tank or reservoir, P, to one of the standards which support the grindstone, so that the same shall at all times hang directly under said stone, and using the same in combination with an adjustable grindstonehus upon a movable plate or disk, substantially as and for the purpose described.

74,043.—Churn.—W. C. Rohinson, Saltshurg, Pa

stonenus upon a movable plate or disk, substantially as and for the purpose described.

74,943.—CHURN.—W. C. Robinson, Saltsburg, Pa.

I claim the dasher, H. composed of the periorated hollow cone, D. the frame, F. F., the cylinder, E., and the disk, G. as and for the purpose specified.

74,944.—UMBRELLA.—Edmund F. Schreiner, St. Louis, Mo. Antedated February 17, 1888.

I claim an umbrella provided with a channel or conductor, secured to its lower outside edge, substantially as described.

74,945.—Table Caster.—Daniel Sherwood, Lowell, Mass., assignor to Woods, Sherwood & Co.

I claim as a new and improved article of manufacture, a table caster, consisting of the parts a, b, c, etc., constructed substantially as described.

ststing of the parts a, b, c, etc., constructed substantially as described.

74.946.—ARTIFICIAL WINE.—John F. Seibenmann, Milwaukee, Wis,
I claim the production of wine from the ingredients, and by the process substantially as herein described.

74.947.—MEAT CUTTER.—John E. Smith, Buffalo, N. Y.
I claim, ist, The combination of the central shaft C, the cutting knives E, and the spring I, or its equivalent, substantially as and for the purposes herein described and set forth.

2d, The double eccentrics I and U, the bars or spring catches W and X, or the equivalent thereof, and the severs U and I', when constructed and arranged substantially as and for the purposes described.

74.948.—MACHINE FOR. SEWING BOOKS.—David M. Smyth.

ranged substantially as and for the purposes described.
74,948.—Machine for Sewing Books.—David M. Smyth, Orange, N. J., assignor by mesne assignments to John T. Lary, Nev

-Washing Machine.— Daniel E. Somes, Washing-4.949.

74,349.—WASHING MACHINE.— Daniel E. Somes, Washington, D. C.
I claim, 1st, The wheel and cylinder, as described, when operated together, substantially as and for the purpose set forth.
2d, The inclined floor of the box, in combination with the wheel and cylinder, substantially as and for the purpose set forth.
3d, The combination of the box, wheel and cylinder, with or without netting or gauze, as and for the purpose set forth.
4th, The wheel or rock shaft, with buckets, and the cylinder with means for heating the suds or generating steam, substantially as and for the purpose set forth.

orth.

5th, A washing machine substantially as described, with means for heating the suds and generating steam. In combination with a safety valve attached to said machine, substantially as and for the purpose set forth.

74,950.—Hose Coupeling.—Joseph Steger, New York city. Antedated Feb. 14. 1868.

I claim the teeth as, b, and set screw c, or its equivalent, in combination with the two half couplings A B, constructed and operating substantially as and for the purpose set forth.

74,951.—RALLWAY SWITCH.—Wm. J. Stowell, Baltimore, Md.

74 991.—ftALLWAY SWITCH.— W.H. J. SLOWEII, BAILIMOFE, M.C. I claim, ist, The arrangement of the switch rail sections A'and B', between the turnout rail B, and the main track rail A, the former being laid so as to overlap the fixed main rail A, substantially as described. 2d, The spring b, ortis equivalent, interposed between the rail B, and lever D, in combination with the connecting rod a, and switch sections A'B', substantially as described.

3d. A railroad-rail switch, constructed and operating substantially as set forth.

74,952.—Mechanical Movement.—William R. Swinnerton,

(4,902.—MECHANICAL MOVEMENT.— Uniform to the same, Peoria, Ill.

I claim, 1st, The lever E, with its arms K, and all equivalents of the same, constructed and operating substantially as and for the purposes sdecified.

2d, In combination with lever E, the slotted wheel as described, and the shaitsL and G, constructed and operating substantially as set forth.

3d, The mode of adjustment and arrangement of the shaif s L and G, herein set forth, in such manner that their relative distance from each other shall correspond to about one tourth the diameter of the wheel.

4th, The combination and arrangement of the various parts herein described and shown, for the purpose of producing accelerated speed in machings.

chinery. 74,953.—HAT RACK FOR SEATS.—Philo Sylla (assignor to

74,955.—HAT KACK FOR DEATS.—I HID SYIIA (assignor to himself, Wm. F. Sylla and Edwin H. Sylla), Elgin, Ill.
I claim the combination of the forked rack F F G, vertical pivot H, and support C D E, substantially as and for the purposes set forth.
74,954.—Chukk.—Jolin Tingley, Philadelphia, Pa., assignor to Philadelphia Wood and Hollow Ware Mannacturing Company.
I claim the inclined disporago, arranged diagonally in the vessel, and held in place by the detachable cover h, all substantially as set forth.

74,955.—Churn —Jose Toll, Locust Grove, Ohio. I claim, 1st, The arrangement of the three oppositely reciprocating dashers BB'B", stems CC'C", cross head D, double crank 1 1 J 1, and pitmen KL

', stems C C' C'', cross head D, double crank I i J J, and pitmen K L purpose set forth. he perforated and vertically adjustable frame M M', socket N, and pins or the object explained. 74,956.—Brick Machine.—Benj. Van Vranken, Schenectady,

N.Y.
I Claim, 1st, The spring catch g4, rodg3, and rock shait g1, for holding up one end of table E, in combination with the arm w, and press box section J'arranged so as to operate substantially as described.

2d. Depressing the mold box table E, by an outward pressure of a hinged

section, J', or its equivalent, applied to the press box substantially as desection, 9, or its equivalent, applied to the press but substantially as described.

31, The application of a self-releasing follower to the mold bux table E, substantially as and for the purposes described.

4th, Providing for a parallel adjustment of the bar K, by means of screws and pinnon-spur wheels, substantially as described.

74,957.—RICE PLANTER.—Elijah Wagoner, Westminster, Md. assignor to himself and G. W. Mathews.

I claim 1st, The plows, E E, when constructed in the form described, and provided with the incine e, and guards, e'e', substantially as and for the purpose set forth.

2d, Conjecting the coverer to the plow by a double joint h, as and for the purpose described.

3d, The coverer H, when constructed in the form described, and provided

And connecting the coverer to the plow by a double joint h, as and for the purpose described.

3d, The coverer H, when constructed in the form described, and provided with the concave-formed edge, and a corrugated under surface, substantially as and for the purpose specified.

4th, fhe rod G, passing from the plow through the arm F, and provided with a screw and but, by which inclination of the plow can be adjusted, substantially as specified.

5th, Constructing the seed conductors of the funnel form sections I II, connected by straps if, substantially as and for the purpose specified.

6th, The combination of the idler N, slide O, and coller K, substantially as and for the purpose indicated.

7th, The markers R R, when attached to the machine, and operating substantially as and for the purpose for the purpose for indicated.

stanlishy as and for the purposes set forth.
Sth. The arrangement herein described of a hoe and trencher outside of each of the supporting wheels.
74,958.—Salinometer Pot.—Henry Wanklin, United States

. A. OU. SALMOMELER I OI.—ITEMPY WEIKHIN, United States revenue steamer Widerness.

I claim a salinometer, in which the specific gravity of the water is determined or measured by its pressure on a movable piston, substantially as and for the purpose set forth. for the purpose set forth. 74.956.—FEED WATER HEATER.—George I. Washburn, Wor-

74.054.—FEED WATER HEATER.—Goodeser C, arranged between the reservoir and pump of the surface condenser D, fig. 1, situated between the pump and boler, substantially as described.

2d. The arrangement of the condenser between two pumps or two ends of the same pump, substantially as described.

3d. A steam pump and condensing apparatus, constructed and arranged substantially as herein described.

74.960.—BLANK FOR HOE.—Hervey Waters, Boston, Mass.
I claim a blank for shovels, hoes, etc., made substantially as shown and described.

74,961—Boring Faucet.—Alfred Weed, Boston, Mass.

scribed.

74,961 — Boring Faucet.—Alfred Weed, Boston, Mass.
1 claim a tapping faucet having a combined valve and bit, arranged to operate substantially as selforth.

74,962.—Shoe.—Martin Wesson, Springfield, Mass.
1 claim, as a new article of manufacture, a shoe, the upper whereof is composed of a woven or knit fabric, and having the "quarter" and the "yamp" of such upper, or either of them, for med of a web which is woven or knit of proper width to form the outside and the lining attached to the outside by tyling or connecting, substantially as sp cited.

74,963.—Concrete Pavement.—Wells H. White, Troy, O.
1 claim concrete pavem are composed of the macerials, and laid hot, and then rolled with a hot roller, substantially as set forth.

74,964.—Prradament of School. Slates.—Lawrence Wiegel, Joseph Lennbeuter, and Charles Fegers, Cincinnati, Ohio.

We claim an artificialisate made with a composition of liquid caoutchouc, asph tum, and subversed pumace stone reduced to a thin paste with spirits of turbenture and applicate pasteboard by means of rollers, all substantially as and for the pumper of specified.

74,965.—Corn Sheller.—John R. Wilbur, Chicopee, Mass.
1 claim, 1st, The V-shaped ribs, k, in combination with teeth • r points, L on the race of the cylinder, A, and \*bennet, B, constructed substantially as described and for the pumposes set forth.

20. The crank, H, and shaft or arm, E, in combination with the hopper, D, constructed as described a.d for the purposes set forth.

Y4,965.—Corn Sheller.—David Williamson, (assignor to James Williamson), New York city.
1 claim the cork drawer formed with a mortise, containing the sliding and pivoted cross bar, with its catch, and the spring for moving the bar cross-wise to the mortise, substantially as specified.

74,967.—Clay Washing and Stone Separating Machine.
Elis Wilzinski, Chea o, Ill.

74,967.—CLAY WASHING AND STONE SEPARATING MACHINE. Ellis Wilzinski, Chicas o. Ill.
I claim the tank, A. Provided with partition, B, beater, M, and sliding gate F, with strainer, G, the whole constructed and operating substantially as and in the manner herein set forth, forming the clay washing and stone separating machine.
74,968.—ATTACHMENT FOR HOT AND B.

ATTACHMENT FOR HOT AIR REGISTER.—James D. McBride, Mansdeld, Ohio. claim in combination with an attachment for a hot air register, the water sels. B and D, arranged in the manner and substantially as berein de-

vessels. B and B, alrauged in the manner substantially as herein set forth.

Also the stand, F, when used for the purpose and in the manner substantially as herein set forth.

Also the combination of the several parts, A B C D E and F, for the purpose and substantially as herein described.

74,969.—RAILROAD UAR STOVE.—A.P. Winslow, Cleveland, O. 1 claim, 1st, The water chamber or tank, B, and perforated water pipe, D, in combination with a railroad stove, substantially as and for the purpose set forth. in comb nation with a tarrows set forth.
2d, The guards, a, in combination with a stove, substantially as and for the

REISSUES.

2,874.—LAMP.—Chas. W. Cahoon, Portland, Me. Patented Dec. 3, 1861.

I claim, 1st, A lever with chimney fastenings, baving that part of it on rhich the chimney rests extended, so as to form a deflector, substantially as

which the enimely resistationed, so as to the many decembers.

2d. The deflector. broad, flat-shaped, or nearly so, when filling the interior or the chimney, and combined with a sir screen and ring with standards, substantially as and for the purposes specified.

3d, The combination of the said deflector with the conical foraminous plece of metal and the cylindrical tubular air screen, for the purpose of forming the air chamber. A, protecting the flame, and admitting the air from the cylindrical seadoscribed. bel. w the same, substantially as described.
4th, The combination with the lever for raising the chimney of the deflector, ar screen, and for aminous plece of metal, substantially as and for the

or, in surecu, and formmous piece of metal, substantially as and for the purposes specified.

5th. The ring surrounding the wick tube, a little above the top of the same, with the standards, as, substantially as and for the purposes specified.

6th. A chimney noider having a projection for manipulating the same, chimney fastenings, a deflector, and a joint, substantially as and for the purpose set forth.

ose sectors.

7th, The combination of the ring, f, supports, ss, and air sereen, c, substantially as and for the purpose set forth.

8th, In combination with the burner of a lamp having a glass body, a metallic handle, as herein described.

stantially as and for the purpose set forth.

8th, In combination with the burner of a lamp having a glass body, a metallic handle, as herein described.

2,875.—EYELETING MACHINE.—Wm. N. Ely, Stratford, Conn., assignee by mesne assignments of N. Ames and J. E. Gowen, Patented May 14, 1867. Division A.

I claim, 1st, A recurrocating heading seat, constructed, arranged and operated substantially as described.

2d, A re-iprocating piston or holding pin, in combination with the heading seat, when, constructed, arranged, and operated substantially as described.

3d, A spring piston rest, in combination with the reciprocating heading seat and helding pin, arranged an ioperated substantially as described.

4th, The reciprocating heading seat and piston, in combination with a vertical header, arranged and operated substantially as described.

5th, A reciprocating heading seat, in combination with a header and work supporting able, substantially as described.

6th, A heading seat, header, and work supporting table, in combination with a work feeding device, substantially as described.

2,876.—Hyeleting W. Ac Ine.—Wm. N. Ely, Stratford, Conn., assignee by mesne assignments of N. Ames and J. E. Gowen. Patented May, 14, 1867. Division B.

I claim, ist, A common receptacle or hopper, adapted and arranged for holding the cyclets when thrown in promiscuously, substantially as described, in order that they may be automatically discharged therefrom and delivered in proper position to the healing mechanism, for the purposes set forth.

2d, Agitating the cyclets so as to present them in proper position to the eyelet feeding mechanism, substantially as described.

3d, A promiscuous eyelet holding hopper, provided with means for delivering the eyelets in proper position, an eyelet feeding mechanism, and an eyelet beading mechanism, when combined and operating substantially as described.

4th, in combination with the above, a work supporting table, substantially as described. combination with the element of the third claim and a work sup-

5th, In combination with the element of the third claim and a work supporting table, a work freding device, for the purposes described.

2,877.—EYELETING MACHINE.—Wm. N. Ely, Stratford, Conn., assignee by mesne assignments of N. Ames and J. E. Gowen. Patented May 14, 186t. Division C.

I claim, 1st. A reciprocating punching table, constructed and arranged so as to be alternately removed and replaced, substantially as described.

24. The reciprocating puncher, in combination with the reciprocating punching table, substantially as described.

3d. The combination of a number, a work holding table, and a work feed-

3d. The combination of a puncher, a work holding table, and a work feeding device, substantially as described.

4th, The combination of a puncher and gage for the line of holes, substantially as described.

as described.

3d, A laterally reciprocating punching table in combination with the puncher, header and heading seat, all arranged and operating at the same fixed points substantially as described.

4th, The reciprocating punching table and heading seat so combined, arranged and operating as to alternately occupy the same place for punching holes and heading eyelets at the same fixed point, substantially as described.

boles and heading eyelets at the same fixed point, substantially as described.

5th, Supplying the eyelets from a common hopper to the heading seat or holding point by a belt and groove, substantially as described.

6th, The work-feeding device, constructed and arranged with an eyeleting machine, substantially as described.

7th. The adjustable rage in combination with the holding table for regulating the line of eyelets, substantially as described.

8th, Punching the holes and furnishing, inserting and heading the eyelets at the same fixed point automatically, by means substantially as described, 2880. EYELETING MACHINE. William N. Ely, Stratford, Conn., assignee by mesne assignments of N. Ames and J. E. Gowen. Dated May 14, 187. Division F.

I claim, 1st, the combination of hollow rod, J, and lever, I, arranged and operating substantially as described.

3d, The combination of hollow rod, J, and piston, K, arranged and operating substantially as described.

3d, The combination of hollow rod, J, piston, K, and lever, I, arranged and operating substantially as described.

5th, The combination of hollow rod, J, piston, K, and lever, I, arranged and operating substantially as described.

5th, The combination of hollow, N, piston, K, lever, I, and header, C, arranged and operating substantially as described.

6th, The combination of holpoper, N, with eyelet-feeding mechanism and rods, J and K, and header, C, substantially as described.

7th, The combination of holpoper, N, with eyelet-feeding mechanism and rods, J and K, and header, C, substantially as described.

8th, The combination of holpoper, N, with eyelet-feeding mechanism and rods, J and K, and header, C, substantially as described.

described.

Sth. The combination of plate, U, and levers, V and I, substantially as described.

9th. The combination of puncher, B, header, C, sliding plate, U, and rods, J and K, substantially as described. J and K. substantially as described.

10th, The combination of puncher, B. header, C, plate, U, rods, J and K, hopper, N, belt, R, and groove, X, substantially as described.

11th, The combination of table U, and pawl, Y, substantially as described with the set, or punch and set, of an eyelet machine.

12th, The combination of hoppier, N, with briefles or flexible arms, o. substantially as described,

with the set, or punch and set, or an experience with the set, or punch and set, or an experience with the set, or punch and set, or an experience with the set, or new that tally as described,

2,881.—Base Burning Stove.—Dennis G. Littlefield, Al bany, N.Y. Dated Angust 18, 1863. Reissue 1,594. Dated December 22, 1863.

Dally, N.1. Dated August 10, 1000. Measure 1000. Dally, N.1. Dated August 10, 1863.

1863. Iclam, 1st. The devices described by means of which the magazine and each of he several sections of which it is composed are held in their proper positions while at the same time the several parts are so adjusted as readily to admit to feeing separated and reunited at pleasure.

2d. The corresponding notches or shoulders in the iron cylinder and the lining as described by means of which the hinning is held in its place, not withstanding the greater expansion of the cylinder by heat and without danger theretrom.

standing the greater expansion of the cymner by mean and which therefrom.

3d, The magazine, constructed as described, in combination with the furnace separated from it and suspended within a chamber isolated from the chamber surrounding the magazine.

4th, I he combination of a magazine contracting in diameter from the middle or other line downward to its lower end with a furnace suspended within a coamber isolated from the chamber surrounding the magazine.

5tb, The devices described by means of which I am able to construct what I denominate the upper and lower sections of the burner, each complete in itself separately and so to adjust them as to admit of their being conveniently separated and rounited without injury to elfier.

6th, The intercommunication to be open-d and closed at pleasure between the chamber of a magazine coal curner which surrounds the furnace and that which surrounds the mafazine.

Standard Theory and the surrounds the furnace and that which surrounds the mafazine.

the chamber of a magazine coal curner which surrounds the furnace and that which surrounds the marazine.

2.882.—Lamp.—Wm. N. Ely, Stratford, Conn., assignce by mesne assignments of L. Bailey and R. Thayer. Patented May 1.188. I claim, ist, Suspending the body of the lamp within an outer case, so arranged that the air shall pass within the case and around the lamp body to the flame, substantially as described.

2d, A hollow lamp case, pedestal, and base, constructed and arranged in relation to the lamp body substantially as described.

3d, An annular lamp body in combination with an outer case, substantially as described.

3d, An annuiar tamp body in communication as described.

4th, Constructing and arranging the parts so asto deflect the air count of unfrom outside the lamp bouy toward the flame, substantially as described.

5th, Supplying air to the flame by means of the channel formed between the body of the lamp and the outside shell or case, substantially as described.

6th, Arranging and using the rod or wire, K, in relation to the flame and hollew pedestal and outer case, substantially as and for the purposes dehollew pedestal and outer case, substantially as and for the purposes accribed.

7th, The concavo-convex button constructed and arranged substantially as

and for the purpose described. 2,883.—Tumbler Washer.—John Solter, Baltimore, Md.

Patented Sept. 4, 1966.
I claim, 1st, In a tumbler washing machine operating the valve, e, by ressing the tumbler, in seating it, in the manner as shown and described and for the purpose set forth, and valve, e. constructed and operated in the manner substantially as shown and described and for the purpose set

2,884.—HAY KNIFE.—Philo O. Soper, San Francisco, Cal. Patented Jan. 29, 1867.

I claim, 1st., the construction of the blade, B, substantially as described. 2d, The bearing of the shank, C, in connection with the angle given to the edge of the blade, B, substantially as and for the purpose described. 3d, The point, A, substantially as and for the purposes above described.

2,885.—Last.—Ambrose Taylor, Osawatomie, Kansas. Pat-

2,003.—IAST.—Alliorose Taylor, Osawatomie, Kansas. Patented Nov. 5. 1867.
I claum, 1st. The spring hook, E, secured by its shank, F, in the block, B, and engaging with the book C, set in the last A, all constructed and arranged to operate as berein set forth for the purpose specified.

2. The Preve tition of lateral or backward movement of the block, B, by having the hook, C, extend upward above the surface of the upper side of the last, and within a recess in the undersurface of the block, B, substantially as shown and described.

DESIGN.

2,940.—Clock Front.—Amos Wilder and Cyrus W. Strout.

NOTE.-FIFTY-SIX patents in the above list were obtained through the Home Office of the Scientific American Patent Agency.—Eds.

## PENDING APPLICATIONS FOR REISSUES.

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

59,395.—HAND STAMP.—B. B. Hill, Chicopee, Mass. Dated Nov. 6, 1866. Reissue No. 2,836. Dated Jan. 14, 1868. Application for reissue received and filed Feb. 8, 1868.

1st, I claim, in combination with the type wheel or wheels and inked ribbon of a band stamp, a series of characters arranged in a circle concentric with the face or periphery of the type wheel and revolving with and always occupying the same relative position to the characters upon the Printing face of said type wheel for the purpose of indicating to the operator the figures or characters to be stamped, substantially as described.

2d, I claim the base, 6, having the projecting rim, U, and the axis pin, a, and the tace place, P, the whole forming a wheel case or protection for the type wheels, when constructed and arranged substantially as herein described and set forth.

3d, 1 claim the wheels, KK', arranged upon the same axiewith the wheels, I J, in combination with a hand stamp, arranged and operating substantially

3d, I claim the wheels, KK', arranged upon the same axlewith the wheels, IJ, in combination with a hand stamp, arranged and operating substantially as described.

4th, I claim the bracket, H, made on or secured to the case, G, having a step, c, or its equivalent, to enter the lower end of the spindle, and orifice for the screw, e, for attaching and detaching said case to the spindle, E, suostantially as and for the purpose described.

5th, I claim the fixinge, K, in combination with the chase, L, for the purpose of easily and quickly attaching the type plate to or detaching it from a hand stamp, when constructed and operating substantially as herein described.

59,388.—Medical Vacuum Chamber.—George Hadfield, Cincinnati Chio. Dated Nov. 6, 1866. Application for reissue received and fled Feb. 3, 1868.
I claim the employment of a hand support or rest, substantially as and for be purposes set forth.
Labodaim the scaling cap, F, substantially as and for the purposes set

89,043.—FIRE GRATE.—W. D. Guseman, Morgantown, West Va. Dated June 30, 1863. Application for reissue received and filed Feb. 8, 1868. 1st. I claim the sliding blower or screw in combination with the grate, for the purpose specified.

2d, The damper in combination with the flue, sliding blower or screen and grate, all arranged substantially in the manner as and for the purpose set forth.

set forth.

54,662.—RAILWAY CAR.—E. H. Ashcroft, Lynn, Mass. Dated May 15, 1856. Application for reissue received and filed reb. 11, 1868. I claim a safety car constructed with a water space with one or more showering pipes and a fusible plug apparatus, arrang at substantially in manner and so as to operate with respect to the carchamber, as specified. I also claim, in combination with a water space, substantially as herein set forth, a heating apparatus and circulating pipes, whereby the water shall be caused to circulate substantially upon the principle as herein set forth.

NOTE.--The above claims for Reissue are now pending before the Pat ent Office and will not be officially passed upon until the expiration of 30 days from the date of filing the application. All persons who desire to oppose the Grant of any of these claims should make immediate appli MUNN & CO., Solicitors of Patents, 37 Park Row N. Y.

### EXTENSION NOTICES.

Thomas A. Steadman, administrator of the estate of Thomas S. Steadman, deceased, of Lyons, Mich., having petitioned for the extension of a patent granted to the said Thomas S. Steadman the 23d day of May, 1854, and reissued in three divisions the 19th day of June, 1860, respectively numbered 985,986, and 987; No. 935 was again reissued the 5th day of June, 1856, and numbered 2,279, and No. 987 was again reissued the 20th day of June, 1865, and numbered 2,009; for an improvement in clover and grass seed harvesters, for seven years from the expiration of said patent, which takes place on the 23d day of May, 1868, it is ordered that the said petition be heard at the Patent Office on Monday, the 4th day of May next.

Frederic Howes, of Boston, Mass., having petitioned for the extension of a patent granted to him the 20th day of June, 1854, for an improvement in extra yard to topsails, for seven years from the expiraton of said patent, which takes place on the 20th day of June, 1868, it is ordered that the said petition be beard at the Patent Office on Monday, the 1st day of June next.

George T. Bigelow, administrator of the estate of Samuel Nicolson deceased, of Boston, Mass., having petitioned for the extension of a patent granted to the said Samuel Nicolson the 8th day of August, 1854, for an improvement in wooden pavements, for seven years from the expiration of said patent, which takes place on the 8th day of August, 1868, 1tis ordered that the said petition be heard at the Patent Office on Monday, the 6th day of July next.

# NEW PUBLICATIONS.

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