## RECENT AMERICAN PATENTS

The following are some of the most important improvements for which Letters Patent were issued from the United States Patent Office last week. The claims may be found in the official list :--

Brick Machine - This invention consists in the use of a cylindrical mold provided with sliding plungers and fitted in a mounted frame on which a mixing or tempering device, scraper, sand-box and frameelevating device are placed; the several parts being arranged in such a manner that the machine may be used either stationary for mixing or tempering and pulverizing the clay and molding the same into bricks, or be drawn along and operated by traction so that the work referred to may be performed and the molded bricks also properly distributed or laid upon the yard. J. N. Newell, of St. Louis, Mo., is the inventor of this brick machine.

Shingle Machine --- This invention relates to an im proved shingle machine of that class in which a circular saw is employed for cutting the shingles from the bolt : and it consists in the employment of a horizontal circular saw in connection with a sliding frame provided with clamps or dogs, arranged in such a manner that the latter may be conveniently manipulated in connection with the frame and the bolt from which the shingles are cut, and fed with the greatest facility to the saw and withdrawn therefrom. The invention also consists in the employment of supporting bars so arranged relatively with the saw and the bed on which the bolt is moved and ad justed, that the shingle, while being cut from the bolt, will be fastened or held in proper position and a clean smooth cut obtained the whole width of the bolt. The invention further consists in using, in connection with the saw, supporting bars, and the clamps or dogs, a bed arranged in such a manner as to admit of the bolt being very readily adjusted to have the saw cut the shingle in proper taper form Simeon Heywood, of Claremont, N. H., is the inventor of this improvement.

Weapon of War.-This invention consists, first, in the combination with a lance of a revolving minv chambered cylinder of similar character to that commonly used in revolving fire-arms arranged to rotate upon the pole or shaft of the lance, by having the said pole or shaft passed directly through it. It also consists in furnishing the so-applied many-chambered cylinder at its rear end, with a circular series of ratchet-like teeth, corresponding in number with its chambers, and in fitting the lance pole or stock with a sliding hammerso formed and arranged that by turning the cylinder upon the said pole or shaft, the said teeth may be made to force back the said hammer in such a manner as to permit it to be driven forward again by a suitably applied spring, and thereby caused to strike upon percussion caps or their equivalents applied in rear of the several chambers. for the purpose of firing the charges of the said chambers one at a time and in regular succession all round the cylinder. It also consists in fitting the butt of the pole or shaft with a spike which can be sheathed by being packed into the pole or shaft when the weapon is to be carried or used, and protruded from the butt to enable it to be driven into the ground to hold the weapon in an upright position ready to be quickly laid hold of when required for use. This weapon is suitable for arming either infantry or cavalry but especially for infantry, .1 C. Campbell, of New York, is the inventor of this weapon.

Reclaiming Exhaust Steam.-This invention consists in a certain arrangement of a rotary fan in combination with a box or chamber containing a series of parallel radiators into which the exhaust steam from au engine is delivered, whereby air is drawn copiously and directly through the intervening spaces between the said radiators for the purpose of carrying off the heat from and effecting the condensation of the steam, and the said air heated by the heat abstracted from the steam is conveyed to the boiler furnace or other apparatus where such heat may be utilized. A. C. Fletcher, of New York, is the inventor of this improvement.

Cutting out Bayonet Scabbards .- The object of this invention is to cut up a piece of leather or other material in pieces suitable to make scabbards for bayondes. The invention consists in the ar.ange-i whole of North America.

ment of two sets of knives secured in oblique direcions in the surfaces of two rotary cylinders, at such listances apart that the spaces between the knives on each cylinder correspond in shape and size to the blank required for a scabbard, the two sets of knives being inclined in opposite directions, those in one cylinder toward one and those in the other toward the opposite direction, in such a manner and in such relation toward each other that by the action of the two sets of knives, the blanks are cut out out with both edges beveled off toward the same, say the flesh side of the skin, where leather is used and that the same can be bent up and the edges secured together, sproducing a flat seam. Henry D. Smith, of New York, is the inventor of this improvement.

Siphon Filter.-The usual mode of emptying a blow-up pan is to melt the sugar in the pan and draw the sirup or liquor at or near the bottom through a strainer, thus first drawing off the dirt. The object of this invention is to draw off the sirup from the surface where it is clear, and allow the dirt to settle at the bottom of the pan, to be shoveled out after the sirup has been all discharged, and to this end it consists in a flexible pipe or a pipe with flexible or folding joints, with an outlet through the bottom of the pan and with a float and strainer at rbe top, the float remaining at the top of the sirup or liquor and keeping the strainer just below the surface thereof and the pipe connecting with the strainer in such a manner that the sirup or liquor passes through the strainer before entering the pipe. C. N. Brock, of Philadelphia, Pa., is the inventor of this improvement.

Nail Plate feeder .- J. S. Fisk, of Youngstown, Ma honing county, Ohio, has recently invented an automatic nail plate-feeder, which is highly spoken of by those who have witnessed its operations as a machine of great merit. The mechanical construction of the machine is of the first class and gives evidence of inventive talent of a high order. Letters Patent for this invention were granted through the Scientific American Patent Agency on June 30, 1863, and an engraving will appear in this paper so soon as it can be prepared.

#### An Immense Breech-loading Gun.

Our readers will recollect that some months ago we noticed the construction here of a steel breechloading gun, the invention of Mr. Mann, capable of being discharged with the most extraordinary rapidi-The gun was taken to Washington and gave ty. such satisfaction in its trial there, that Mr. Manu was commissioned to make one of the largest size on the same principle. He has been at work on the new piece for several weeks, and it is now so near completion that in a very short time it will be ready for service. The new gun will throw a ball of the elongated pattern, weighing one hundred and fifty pounds, and will, it is stated, have a range of some four miles! It can be fired with ease, and without the slightest danger, one hundred times in as many minutes, and is so simple in all its parts that it will be almost impossible for it to get out of order. It is the largest breech loading gun ever made in America, and its trial will be looked for with more than ordimary interest -Pittsburgh Chronicle.

# Chem:cal Dangers,

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M. Rouelle, an eminent chemist, was not the most cautious of operators. One day, while performing some experiments, he observed to his auditors. "Gentlemen, you see this cauldron upon the brasier; well, if I were to cease stirring a single moment, an explosion would ensue which would blow us all in the air." The company had scarcely time to reflect upon this comfortable piece of intelligence before he did forget to stir it, and his prediction was accomplished. The explosion took place with a horrible crash: all the windows of the laboratory were smashed to pieces, and two hundred auditors whirled away into the garden. Fortunately none received any very serious injury, the greatest violence of the explosion having been in the direction of the chimney. The demonstrator escaped without further injury than the loss of his wig.

THE continent of Africa contains over 11.000.000 square miles-being three millions more than the



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ISSUED FROM THE UNITED STATES PATENT OFFICE

FOR THE WEEK ENDING JUNE 30, 1863.

Reported Officially for the Scientific American.

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

024.—Rifting Fire-arms.—E. G. Allen, Boston, Mass. (claim the method of vifting or growing the barrels of free.arm combining the irregular gain twist, as hereitubefore describe th the shallow curved depression, substantially as herein show d set forth. 39.024.

39.025.-Machine for breaking and dressing Flax, &c.-

39,025.—Machine for breaking and dressing Flax, &c.-S. M. Alien. Woburn, Mass.:
I claum, first In combinating, with a series of flotted rollers ceared by a revolving fluted drum, two fluted rollers is a arraiged is the on-age with and be geared by respectively the instand last drum geared roller, substantially as and for the purpose herein set forth. Second, The combination of a series of fluted rollers arranged about a central fluted drum with one or more pairs of clusters of revolving stripping or soutching blades, arranged for operation substantially as herein deverbed.
Third. The uself-instant of two or more pairs of revolving soutch-ing blades, with intermediate check rollers, arranged and operating substantially as herein described.

39,026.—Nursery Chair.—A. B. Anderson, Jr., Brooklyn, N.Y.: I claim. first, The use or employment of the secondary frame work, B, in combination with the frame.work, A, when arranged and operated as here in shown, for the purpose specified Second, H Jding the frame.work, B, in position, when the same. shall be elevated in the manner and by the means here in fully de-scribed

shall be elevated in the manner and  $\phi_1$  the manner and  $\phi_2$  the seried Taird. In combination with the cam-shaped pieces provided with the pins. I claim the sockets provided with the openings, for the purpose fully set forth. Fourth 1n combination with the frame-work Q. I claim the use or employment of the slotted centerpieces, K, and side arms, N, for the purpose shown. Fifth, In combination with the same, I claim the frame-work Q, operated as shown for the purpose specified.

39,027 .- Fruit or Preserve Jar .- J. S. & T. B. Atterbury, Pittsburgh Pa. :

Pittsburgh. Pa.: We claim, first, The combination metallic and rubber annular band, d.e. constructed in the manner and for the purp we described. Second, The combination metallic and rubber band, d.e. pr con rection with the bevelled-deg air cover, B d, and jar, A, in the man-ner and for the purpose described.

39,028 .- Drag Saw .- James Bailey, Prairie Township. Ind.

Ind. : I claim. first, The arrangement of the inclined frame pieces, A. A. In combination with the apright stand. B. front and back sills. C and D, and braces, F.F. in the manner described and for the purpose herein specified.

Second, I claim the truck wheels, S.S. and handles, T.T. in combi-tation with the arrangement of the guide, F, and braces, G and H, and saw-biade attachment, substantially in the manner and for the opropose herein sheefined Third, I claim the connecting link. G. Figs. 2 and 3, in combination with the pirman strap, A, and saw-blade strap, B, in the manner and or the purpose herein specified.

39 029 -Washing Machine .- S. M. Barnett, New York

39 029.-Washing Machine.-S. M. Barnett, New York City: I claim, first, The arrangement of the reciprocating cross-head. E, provided with runbing rollers, d, and swinging soap-box. G, a-d mvt-ing in the slotted hinged frame, C, which is adjustable by a treadle, D, in the manner and for the purpose substantially as shown and de-scribed Second, The adjustable spring, f, in combination with the soap-box. G, as and for the purpose set forth. Third, The feed arms, H, in combination with the recuprocating runber head, E, and soap-box, G, substantially as and for the pur-pose specified. Fourth The arrangement of the switel arm. M. with the furnace, r in combination with the trame, A, which carries the wash-board, B, as and for the purpose described. (The object of this invention is to imitate by machinery the action

(The object of this invention is to imitate by machinery the action of hand-washing, spreading the clothes to be washed, one after the other, on a corrugated or fluted wash board on which the soap is applied and the rubbing performed, while, at the same time, the piece to be washed is fed along, causing the soap and rubbers to pass grad ually over its entire surface.]

30.-Granary.-A. London, England : 39.030.--A. C. L. Devaux, King William-street,

London, England: I claim the grave receptable, A, when made with perforated walls and an alrspace between the receptacles, in combination with the central perforated air tubes, B, as herein shown and described. The lateral air-pipes C, in combination with the central tubes, B, and receptacles, A, as herein shown and described. This invention relates to a novel construction of granaries by

which perfect preservation of the grain placed therein may be in sured by means of natural aeration combined with artificial ventilation. The operations of natural aeration and artificial ventilation may be employed, either separately or in combination, according to the requirements of the case.]

39,031.—Siphou Filter for drawing Sirups, &c.—C. N. Brock. Philadelphia, Pa.: I claim having the filter or filtering drawer, C. constructed with the foat, D. immediately abovet, in combination with the jointed pipe, B, all in the manner herein shown and described.

p, an in the manner nerein shown and describe. 39,032.—Combined Pike and Revolving Fire-arm.-J. C. Campbell, New York (ity: I claim, first, The combination with a lance of a many-chambered cylinder of similar character to that of a recoving fire-arm fluce to constitute upon the pole or shaft of the lance, substantially as herein download.

described. Suart or the sance, substantially as herein Second. The combination of the series of ratchet-like teeth on the rear of the so-applied many chambered cylinder, the sliding hammer and the soring, substantially as and for the purpose herein specified. Third, The movible spike fitted and secured in the but of the nance, pole or shaft, substantially as and for the purpose herein speci-fied.

39,033.-Tape Fuse.-J. E. Chase and Joseph Toy, Simsbury, Coun. : We claim the employment, as a covering for fuse, of tape composed

of two warps and an interposed lap of cotton or other fibrous mate rial, substantially as herein specified. I [This invention consists in the employment, in the manufacture of

tape fuse, of a new kind of tape composed of two warps or series of parallel varns and an interposed thin lap of cotton or other fibrous material united by sizing.]

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39,034.—Boot-tree.—W. C. Clark, Baltimore, Md. : First, I claim the construction and employment of a lever staff of "calf-stretcher piece," ft, formed with the double incine surfaces g g h I, and provided with the elongated slot, j, by which sail lever staff is adjustable up and down, in and out, and whereby the leg, heel instep or toe of the boot may be acted on separately, by one single horizontal hand, n o, substantially in the manner as set forth and de-certiend

norizontal nand, n o, substantially in the manner as settorin and de-scribed. Second, I also claim the employment of an adjustable slidingstop piece, d, a attached to the tibia or shin block, a a a, together and in combination with the herizontal tightening screw, n o, and lever staff piece, if g h h i j, for the purpose as here in set for thand described. Third, I also claim the construction of the attachable, angular or wedge shape last, as s, together with the attachable, angular so wedge shape last, as s, together with the attachable, angular so blocks, q q q, when combined, employed and operated in connec-tion with the lever staff, ff g h h i j, substantially in the manner and for the purpose set forth and described. Fourth, I claim the employment of adjustable collars, p p p, when combined and used with the adjustable lever staff or calf-stretcher piece, f g h i j, for the purpose and in the manner substantially as set forth and described.

39,035.—Churn.—L. S. Colburn, Oberlin, Ohio : I claim the above-described dasher, having the flat oblique beater and the broad horizontal shart, constructed and operated substantial-ly in the manner and for the purposes set forth.

39,036. — Water Elevator. — James E.Cronk, Poughkeepsie
 N.Y. Ante-dated Jan. 10, 1863:
 1 claim the combinuon and arrangement of the shaft, J. loost roller, G. ratchet, N. orits equivalent, and sliding tube, M. substan tially as described

ually as described.
39,037.—Planing Machine.—Lafayette Doolittle, Bush-ville, N.Y.:
I olaim the stationary knives or planes, D D, and pressure rollers, E E, in combination with the reciprocating plate or head, G, and the stops or gates, J, all arranged for joint operation as and for the purpose specified.
I also claim the curred bar, K, when sprise to the platform B, and in such station with the planing mechanism as to discharge the fittingers or other articles planed, laterally from the machine, as set forth.

[This invention consists in the employment of two stationary cut

ters or planers, a reciprocating head or plunger, prossure rollers, and vertical stops or gates, all arranged in such a manner that shingles, pickets and like articles may be planed in a perfect and expeditious manner.]

39,038.—Steam Engine.—N. T. Edson, New Orleans, La. I claim, first, The using of a steam-chest for a slide valve, in com ination. with the roller, g, plate, h, and stay, J, substantially as se forth.

forth. Second, The joint, Fig. 3, in combination with the plate, 4, by which the gland. 2, is held against the packing. Third, The combination of the eccentric frame, m, and block, o, for the purposes specified. Fourth, The combination of the eccentric rod, p. 'governor rod, u, angle lever, v, and lever, r, when acted upon by the governor to regu-late the speed of the engine.

ate the speed of the engine.
39,039.—Wringing Machine.—Lucius Evans, Fayetteville, N. Y.:
I casin the arrangement and combination of the cross band and pulleys with elastic rollers, when arranged and combined with the elliptic springs, K, and the sliding boxes, I, as herein desc ed and for the purposes set forth.

39,040.—Condenser for Steam Engines.—A. C. Fletcher, New York City : New York City: I claim the arrangement of the rotary fan to draw the air directly arough the box or chamber, B, and between the radiators, A A, rithout the intervention of pipes or passages, substantially as and or the purpose herein set forth. for the purp

39,041

tor the purpose herein set forth. 39,041.—Heating Apparatus.—E. C. Gillette, San Fran-cisco, Cal. Ante-dated Feb. 21, 1863 : I claim, first. The urn-shaped vessel, I, annular perforated ring, d. concave sprinkler, n, and water vessel, J, arranged in combination with the air chamber and operating in the manner and for the pur-pose described. pose described. response described. response described and operating in the manner and for the pur-pose described. response to the arrangement of the upper, and lower compariments, B D, having ingress and egress openings, K L, communicating with each other through the fluxes, b, in combination with the cold air pipe, G, air chamber, C, and exit tube, H, when used with the vaporizing apparatus set forth in the preceding claim, substantially as de-scribed.

This invention relates to a stove attachment for warming and ventilating buildings and consists in the peculiar construction and ar rangement of parts, whereby the smoke and gases escaping into the chimney are made to heat fresh air and the same is introduced into

the apartment in a suitable state for healthy respiration.] 39,042.-Oven.-P. J. Gindre and John Doerler, Cincinnati, Ohio :

nati, Ohio : We claim, first, The arrangement of the oven, A. placed concentri-cally within and entirely enveloped by the portable furnace, B, in combination with a cart or wagon, substantially as set forth. Second, A portable oven circular in its horizontal section and hav-ing an elevated and revolving foor, E, capable of discretionary ven-tilation on its under side, as and for the purposes set forth. Third. We claim, in the described adaptation to a portable oven, the ventilating chamber, a', interposed between the floor, E, and bet-tom, a', of the oven proper, and having registered communications, F f, with the external air, substantially as and for the purposes set forth.

39,043.—Fire Grate.—W. D. Guseman, Morgantown, Va.: I claim the damper, G, when arranged as shown and used in con-nection with the flue. F, the sliding blower or screen, D, and the front and bottom grates, B C, as and for the purpose herein set forth.

[The object of this invention is to construct a fire grate in such a anner that a greater heat-radiating surface than sual will be ex-

posed, and consequently a saving in fuel is effected.] 39,044 .- Farm Gate .- W. C. Herider, Miami Town, Ham-

9,043.— Farm Gaues.— w. O. Hernter, Mannie Town, Hanne ilton county, Ohio : I claim the combination of the bars, B B', one or more, and the djusting chord rods, D G, one or more, with the connecting rod, E, in the manner herein shown and described.

[This invention consists in a novel and improved manner of bracing the gate, whereby the same is rendered less liable to sag than usual

and in case it does sag is rendered capable of being restored or brought back to its original position.]

19,045.—Folding and ruling Paper.—J. P. Herron, Washington, D. C. : I claim, first, The ruling and folding, Figs. 1 and 2, substantially as a former for the statement of the 39,045.-

1 claim, first, the futing and fouring, rigs, risks 2, descending as set forth. Second, The rolling or packing, as described and shown in Fig. 5. Third, The cutting of the paper juto the form shown in Figs 1 and 2, in combination with the ruling and folding shown in said Figs. 1 and 2, substantially as described.

39,046.-Shingle Machine.-Simeon Heywood, Claremont,

N. H.: I claim the combination of the beveled tilting bed, G', shaft, 1 upporting bars, p, with the adjustable bars, H, reciprocating fr  $\lambda$ , levers, E F, dogs, G, and saw, C, in the manner and for the ose herein shown and described. Supp D. le

39,047 .- Steam Boiler .- Alonzo Hitchcock, New York

City: Securing the flues of steam boilers to heads which may be re-moved from the shell, substantially in the manner described and for the purpose set forth. I claim connecting or attaching the tubular feed roller, M, with

39,048.—Bog-cutting Machine.—Chester Hoisington, Sew-ard. III.:

ard, Ill.: I claim the sled provided with the knife, A, and seat, F, as and for the purposes set forth. Second, In combination with the sled I claim the adjustable scra-per, B, constructed and operating as and for the purposes set forth. Third, I claim the combination of the roller, C, provided with the box, E, with the sled and scraper, B, in the manner and for the pur-

poses set forth. 39,049.—Thrasher.—J. P. Jager, Eureka, Wis.: I claim the combination of the rocking beater frame with a fan and screen, substantially in the manner and for the purposes set forth. 39,050.—Churn Dasher.—Melvin Jincks, Steuben County, N.Y.:

I claim the arrangement of the arms, b, in the shaft, A, as and for the purpose herein described. 39,051

purpose nervin described. 551.—Machine for hulling Barley, &c.—J. J. Johnston, Allegheny, Pa., and J. E. Weaver, Temperanceville, Pa. Ante-dated March 6, 1863: e claim the use of the wooden drum, h, with bevel or coniformed s, in combination with the beveled or coniformed sides, d, of the , and elevating bar, o, said drum and sides being coated with ry or its equivalent, as herem described and for the purpose set b. w emery forth

39,052.—Sash-fastener.—Morton Judd, New Britain, Conn.: I claim, first, The lever, c, with the flange, 3, around the hub, 2, setting over the flange, b, on the plate, a, as specified. Second, I claim the hollowhub, 2, and spring, 4, to retain the lever, c, in position, as specified.

39,053 .- Envelope Machine .- J. M. D. Keating, New York

39,053.—Envelope Machine.—J. M. D. Reasing, Rev. 2012 City: I claim, first, The adjustable bed in combination with the folding mechanism, substantially as described, whereby the machine can be readily adjusted to fold the envelope loose or tight and for varying thicknesses of paper, substantially as described and set forth. Second, In combination with the folding mechanism, the plate, H, covering the aperture in the form, thereby preventing the blanks from catching or displacement as they are selzed, and carried under the plugger, substantially as described and set forth. Third, In combination with a movable form for carrying the blanks and a folding mechanism, substantially as described, the sleeve shait, a, to work the form, substantially as described.

39,054.—Holder of Tools for Grinding.—George Lissen-den and John Lacy, Chicago, 111. Ante-dated March

den and John Lacy, Chicago, Ill. Ante-dated March 1, 1863: We claim, first, The movable bed pieces, CC, posts, DD, and guide, E, constructed, combined, arranged and operating substantially as set forth. Second, The clamp, H, constructed substantially as described, turn-ing on journals, 22, and suspended from the guide, E, by means of the pendent slides, F F, as and for the purpose set forth. Third, The stone, A, frame, B, adjustable bed pieces, C, posts, D, with their adjusting screws, 5, the guide, E. clamp, H, and pendent slides, F, constructed, combined and arranged substantially as de-scribed.

39,055.-- Churn.-J. A. Lloyd, St. Paul, Minn.: 1 claim the wooden slat dashers, C C, in combination with the wire dashers, A A, lever bracket, gear and tub, all operating in the manner and for the purposes set forth.

39,056.—Lock.—S. N. Long, Chatham, Mass., and M. E. Hathaway, Wareham, Mass. Ante-dated June 9, 1862 •

[The objectof this invention is to obtain a lock which can be locked and unlocked only by the person having charge of the same or by in-formation from that person, and which is also proof against destrue tion by the introduction of gunpowder or other explosives.]

uon by the introduction of gunpewder or other explosives.]
39,057.—Furnace for burning Tar, Oil, &c., as Fuel.—J. C. Love, Pittsburgh, Pa.:
I claim the use and combination of a series of long shallow troughs or trays with a box or heater used for supplying tar or oil to said troughs, through a series of pipes leading to the troughs or trays aforesaid, and placing said box or heater in such close proximity to the furnace as that the tar or oil shall become heated as as to generies as before passing into the troughs or trays, for the purposes here in shown and set forth.
I also claim constructing the grate-bars and trays so that they may be reversed, for the purposes here in shown and set forth.

be reversed, for the purposes berein shown and set forth. 39,058. — Drum. -1. Mason, Louisville, Ky. : I claim the employment or use of the plates, D, provided each with two hooks, a a' or pulleys, and attached to the body or cylinder of the drum, as described, in connection with the straining cords, E B', boeps, B B', and with or without the hooks, C, all arranged as and for the purpose set forth.

[This invention relates to an improvement in straining the heads of [This invention relates to an improvement in stating, the back mark the drum, whereby the heads may not only bestrained separately, but with equally as great facility as in the old mode of construction and without rendering the drum any more cumbersome.]

39,059.—Lubricating Axle Boxes.—C. Mezeix, New York City. Ante-dated Nov. 9, 1861 : I claim the arrangement of the reciprocating piston, f, pump barrel, F, and ascension tube, g, in combination with the reservoir, A, sur-rounding the axle box. B, the whole being constructed and operating substantially in the manner and for the purpose shown and described. This invention consists in arranging in the interior of the reservoir which surrounds the axle box and which contains the oil or grease.

reciprocating piston operating in a suitable cylinder and operated by an eccentric or any other suitable means, in combination with a curved ascension tube or spout, in such a manner that, by the action of the piston, the grease is forced up and discharged through the spout on the journal, and that the surplus grease, which drips down from the journal, is sucked up by the pump and used over and over again, as long as the axle is in motion.]

39,060.—Running Gear of Locomotives.—Thos. H. Neal, Pittsburgh, Pa.: First, I claim transmitting motion from the crank shafts to the wheels bearing on the rails, by means of the friction rollersoperating in the manner, and by the means described and for the purpose set forth. Second, I claim securing the hearings of the crank shafts in it

forth. Second, I claim securing the bearings of the crank shafts in the same pedestals wherein the bearings of the axles rest, and so arrang-ing the crank shafts with relation to the wheels bearing on the rails, as that said wheels and crank shafts shall take the entire weight of the locomotive, as herein described and for the purpose set forth.

the locomotive, as herein described and for the purpose set forth. 39,061.—Brick Machine.--J. N. Newell, Des Moines, Iowa: I claim, first, The rotating mold cylinder, I, provided with sliding plungers, ff, when used in connection with the traction wheels, L L, and fitted in a mounted frame, A, previded with a frame-elevating or adjusting mechanism, and all arranged in such a manner as to admit of the mold cylinder being rotated eitherby traction or any extraneous power, as herein set forth. Second, The combination of the mold cylinder, I, hopper, B, pro-vided with rotating rods, c, sand box, M, and scraper, S, all fitted or placed in a mounted frame, A, and arranged for joint operation, as add for the purpose specified. Third, The rod, O, provided with the cam, Q, in combination with the fixed cam, R, and the adjustable plate, N, to which the axles, u u, of the wheels, B, are attached, all being arranged as shown to admit of the adjustment of the frame, A, as and for the purpose specified. Fourth, The rotating oblique rods, c, when used in combination with a rotating mold cylinder, I, for the purpose secified. 190,062.—Straw-outter.—D. J. Owen, Springville, Pa.:

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shaft, L, by means of the coll springs, N N, and disks or heads, d' d', and arranged specifically as herein shown and desoribed, in combina-tion with the feed roller, E', cam, J, pawl, F, and ratchet, d, all com-bined and arranged to operate conjointly as and for the purpose herein set forth bined and arra

(This invention relates to an improved feed mechanism of that class I may have not relate to an important real metalanism of that takes in which flutted pressure rollers are employed. The object of the in-vention is to obtain a means for rendering the upper adjustable feed roller more perfect in its operation than heretofore, so that it will conform better to the varying thickness of the layer of straw which passes underneath it and at the same time insure a regular or uniform feed of the straw to the cutters.]

39,063.—Grain Separator.—J. J. Palmer and A. Plamon-don. Chicago, Ill.: We claim the board, F, attached to the shoe or box, C, and ar-ranged relatively with or applied to the hopper, G, so as to form a continuation of the inner side, b, thereof, to operate as and for the purpose herein specified.

This invention consists in a novel and improved arrangement of a tants invention donaists in a novel and improved arrangement of a blast fan and blast spout, whereby the grain, before passing on the screens is subjected to a blast, and all light foreign substances are separated from it, so that the screens will be enabled to operate much more efficiently than hitherto in separating oats and heavy substances from the wheat. The invention also consists in the employment of a vibrating throat placed in the hopper but connected to the shoe and arranged in such a manner as to effectually prevent the hopper from becoming choked or clogged.)

39,064 .- Slide Valve for Steam Engines .- William Porter,

39,064.—Slide Valve for Steam Engines.— William Porter, Mystic River, Conn.: I claim, first. The arrangement of the surface. M, main slide faces, B B' B'', cut-off slides, X X', and ports, b b', all substantially in the manner and for the purpose herein set forth. Second. The construction and arrangement of the back plate, M, steam-chest. A, wedge faces, m, and single set of adjusting means, M', or their equivalents, substantially as and for the purpose herein set forth.

W, or there equivalents, substantiarly as and for the purpose berefi-set forth. Third, The arrangement of the draining passages or pipes, NN'relatively to the sliding adjustable back plate, M, and to the balanci face, B'', of the main slide, substantially as and for the purpose here in set forth.

39,065.—Pump.—Washburn Race, Lockport, N. Y. : 39,065.—Pump.— Washburn Kace, Lockport, N. Y.: I claim the combination of the greoved metallic, water-packing pis-ton, B, and leather packing, a, or its equivalent, arranged in such a manner that the metallic portion slides easily in the cylinder and forms the guide, while the leather portion produces a more perfect packing without being subject to great wear, substantially as herein set forth. I also claim the groove or enlargement, I in the pump, with the contracted opening, m, above, by which means the water is prevented from overflowing and a greater pressure is produced in the spout, substantially as described.

substantially as described. 39,066.—Watch.—J. A. J. Redier, Paris, France: I claim, first, The combination of the shaft, T, pinion, P', and wheels, H R, arranged and employed as described, to wind the watch. Second, The combination with the above parts of their equivalents of the knob, M, lever, K L, and pinions, i n', for setting the hands.

or the knop, M, lever, K L, and pin lons, 1 h', for setting the hands. 39,067.—Means for Speed in the Propulsion of Vessels.— J. F. Reigart, Washington, D. C. : I claim a self-acting wave-propeller and breaker revolving and op-erating in advance of the vessel for the purpose of accelerating its speed, by dividing the waves and opening a way to relieve the vessel from the resistance of the water.

39,068.—Power Windlass.—E. B. Requa, Jersey City, N. J. :

39,068.—Power Windlass.—E. B. Requa, Jersey City, N. J.: I claim, first, The combination of fixed and movable centers or center bearings, with a drum and the friction surfaces offsat and loose disks or their equivalent, substantially as described. Second, The construction and use of the sleeve or cap as arranged on the shaft and intervened between the center-bearing and drum, or the surposes setfored between the center-bearing and drum, Third, I also claim imparting the end thrust required to effect and maintain the contact of the friction or clutching surfaces, by means of a sorew fixed in the lever or its equivalent, in combination with the sleeve or other competent device, arranged and used substantially in the manner and for the purposes specified. 39.069.

delphia, Pa.:

delphia, Pa. : I claim the combined arrangement described of the open pulleys, C C' C', with the suspending cords, D D', and the single set of holsing cords, E E', the whole operating together substantiality in the manner described and for the purposes specified, whether the said pulleys be attached directly to the window frame or to a separate supporting board attached thereto and forming part of the bind, as described.

39,070. -Composition for Casts, Fancy Articles, Toys, Ac. Michael Schall, New York City :

Ac. Michael Schall, New York City: Telaim the application of terra-alba for "rendering" atearine matter to produce casts of fanog articles. toys and confectioners' ornaments of every variety, substantially as herein described.

39,071 .- Case or Box for holding Oil, &c.-Samuel Selden,

by,U1.—Uase or Box for holding Oil, &c.—Samuel Selden Erie, Pa.: I claim an oil package consisting of a box, A, made of four boards i. rabbeted together and to heads, b, and of a casing, B, surroundin, he box, A. In the manner and for the purpose substantially as show and described.

[This invention consists in an cil package having two boxes, one fitting closely, into the other, the inner box to be made of four sides rabbeted together and provided with heads, one at each end, which

are rabbeted to the sides and the outer box consisting of four sides only, which are dovetailed or otherwise secured together and strengthed by transverse strips in such a manner that oil or other liquid, filled in the inner box, can be safely kept and forwarded to any distance without danger of leakage.] 39,072.—Spout for conveying Sap.—Moses Shelden and W. A. Chase, Calais, Vt. :
We claim the within-described spout as a new article of manufac-ture, the same being formed in lengths having an angular exterior, E F, and a corresponding interior, B C, at one end, and being rounded and chanfered substantially as represented by M M', for the purpose herein set forth.

39,073 .- Grain Separator .- Henry Siddall, San Francisco, Cal.: I claim, first, The conveyer, C, when used as and for the purpose

I chim, first, The conveyer, C, when used as and for the purpose set forth. Second I claim the trough or gutter, D, or an equivalent thereto, for the purpose described. Third, I claim the cut of or dividing pieces. H and I, when made as described and used for the purpose set forth. Fourth, I claim the pieces, N and O, in combination with pieces, M, for the purpose set torth. Fifth, I claim the pieces, N and O, in combination with pieces, M, for the purpose set forth. Sixth, I claim the purpose set forth and described. Sixth, I claim the purpose of returning a part of the grain, as set forth and described. Seventh, I claim the process of returning a part of the grain to pass through the screening apparatus again at the same time, and with the regular supply of grain, as herein set forth.

39,074.—Machine for cutting-out Bayonet Scabbards.—H. D. Smith, New York City. Ante-dated June 16,

1863: I claim, first, Having the inclined oblique knives of one cylinder arranged in reverse position to those of the opposite cylinder, so that each edge of each scabbard and blank will be cut with an inward bevel, substantially as herein  $sh \bullet wand described$ . Second, The combination with the knives, arranged as above described, of the feeding device, C, as herein shown and set forth.

39,075

75.—Cut-off Valve Gear, Robert Stewart, Elmira,

N. 1.: I claim, first, The cylinder, C, and piston, D, in combination with

the vertical platform and braces, G. when constructed and operating substantially as described and for the purposes set for th. Second, The combination of a cross-head, H, and connecting rols I, with a cut-off valve, substantially as and for the purpose described 39,076.—Combined Collar and Hames for Horses.—S. B.

Stewart, Center Township, Pa. : I claim, frst, The combination of the collar, A, and hames, B, sub-tantially as described, so that they shall form but one piece, as set forth. Second, The combination of the tenon, C, ferrule, D, strap, d, staple, c, and hooks, c', as described, for the purpose of uniting the two sides of the collar, as set forth.

of the collar, as set forth. 39,077.—Boiler for Culinary Purposes.—P. L. Suine, of Shirleysburgh, Pa.: I claim a boiler for culinary purposes constructed with an internal tube or pipe communicating at its upper end with the interior of the boiler and provided at its lower end with a hole or opening, so that said tube or pipe, when the boiler is fitted in a hole in the top plate of the stove, will be below the steve plate, and form a communica-tion between the tube or plate at the due of the stove, substantially and for the purpose herein set forth.

[This invention relates to a new and improved boiler for co and consists in having a tube or steam pipe secured within the boiler the upper end of the former being about on a level with the top of the latter, and the lower end extending to the bottom of the b , communicating with the external air. By this arrangement the steam from the boiler, instead of escaping into the apartment as hitherto, is made, when the boiler is fitted on the stove and the cooking process going on, to escape down the steam pipe into the flue of the stove.]

39,078.—Purifying Iron and Steel by means of Blasts of Air.—G. W. Swett, Troy, N. Y.: I claim the use of the apparatus above described, in the manner and for the purpose above specified.

and for the purpose above specified. 39,079.—Water Elevator.—D. E. Teale, Norwich, N. Y.: I claim, first, the catch or click, k, placed upon the pawl, F, and operated by the hook, e, and by the projection, p, placed upon the outer edge of the rim, G, as set forth. Second, In combination with the cylinder, B, and cord or its equiv-alent, I claim the stops, s, s, moving in the slots, r, of the arms, A A, as and for the purposes set forth.

39,080.—Putting up Caustic Alkalies.—E. A. Thomas. Philadelphia, Pa.: I claim a package of caustic alkali inclosed in a glass, stone or earthenware jar, sealed with a non-corrosive cement, as and for the purpose specified.

The object of this invention is to enable the manufacturer of caus

it alkalies to put them upin original packages of such convenien size that when a package is opened, the whole of it may be used a once in afamily without loss.]

39,081.—Joint for Pipes.—H. E. Towle, New York City I claim the combination of the flexible fiange or flanges with internal sleeve, substantially in the manner described and for purpose specified. 39.082.-Refrigerator for Soda-water and Sirups.-J. W.

39,082.— Keirigerator for Soda-water and Sirups.— J. W. Tufts, of Medford, Mass.: I claim the new or improved sirup refrigerator or cooler, consisting of the series of main sirup-holders or chambers, a, the series of aux-iliary lateral chambers, o, and the ice chamber, h, the whole being arranged and so as to operate together substantially as explained. And I also claim the arrangement of sirup and soda vessels or holders, a and c, and the ice or refrigerating vessels or chambers, b, the whole being substantially as specified.

a anu c c, and ne ice or retrigerating vessels or chambers, b, the whole being substantially as specified.
39,083.—Submerged Propeller.—Robert Vaile, Cromwell Terrace, Westbourne Green, London, England. Patente, Westbourne Green, London, England. Patente, and driving endiese chan propellers by means of drums with a colar or collars on shafts and chains to which floats are attached, the collars and chains being constructed and the attachment effected in the manner hereinbefore described.
Also connecting the floats to the endless chains by means of spindles working in lines formed in a piece with links in the endless chains, as hereinbefore described.
Also, the means of causing the floats to assume and retain their respective positions for entering the water, for feathering on leaving the water sufficient the water, consisting of guides and grooves, and of appliances on the floats, all acting substantially in the manner hereinbefore described.
39,084.—Pen.—A. F. Warren Brooklum N. V.

39,084.—Pen.—A. F. Warren, Brooklyn, N. Y.: I claim the flexible and elastic band or clasp, B, applied to a pen substantially as and for the purpose herein specified.

(The object of this invention is to convert an ordinary gold or other pen into a fountainpen, and to this end it consists in the application to and around the nibs of such pen of a band or clasp of vulcanized india rubber or other flexible and elastic substance, such band or that rubber of other matrice and classic classical equations are class retaining above it in the pen a considerable quantity of ink, and so forming a fountain but not interfering with the elasticity of the pen or with the flow of ink down the slip of the point thereof.

39,085.—Watch.—Alexander Watkins, London, England I claim having the axis of the escapement lever placed equi-distan between the palletfaces and the notch of the fork, w, in combina-tion with the arrangement of the three axes, h'i'k', on the same plane, as and for the purpose herein shown and described.

[This invention consists in so arranging the escapement wheel with its axis in the same plane with the staff of the balance and pivot of the escapementlever that the leverage exerted by the escapement wheel on the two pallets is equal and the distance from the pivot of the escapement lever to the notch of the fork is equal or nearly so to the distance from the faces of the pallets.]

39,086 .- Soda-water Fountain .- D. & T. Williams, San

Jose, Cal.: We claim as an improved article of manufacture a soda-water fountain constructed of sheet-metal with its heads, B B, fitted and secured in it substantially as shown and provided with a tube, C. eduction pipe, D, and discharge pipe, H, the eduction pipe, D, hav ing two passages, dd, within it, and provided with a valve, f, fitted ir a chamber, e, as herein described.

This invention relates to a new and improved portable soda-wate fountain designed; to be placed on counters, the soda-water being drawn directly from the fountain. The invention consists in con structing the fountain in a novel way and providing it with an educ tion pipe and cock, all arranged in such a manner as to form an im proved article of manufacture for the purpose specified.]

39,087.—Car Coupling.—C. C. Wilson, Kewannee, Ill.: I claim the plate, C, of circular or a pproximate form and provided with a shoulder, e, in combination with the stop or bar, F, and loop, H, or its equivalent, all arranged relatively with each other and in connection with the draw-head, A, to operate as and for the purpose consider

specified. I further claim the jog, d, in the back part of the recess, a, for th purpose of holding the link in a horizontal position as specified.

[This invention consists in the employment or use of a circulal hook plate placed eccentrically on a shaft in the draw-head and ar ranged with a stop in such a manner that the hook will serve as ening for the links, so that the latter wherein thus fitted in two ad joining draw-heads will form a connection between the cars thereof The hook-plate is so arranged that it will, when not in use, remain in a position to admit of the link when it enters the draw-head to connectitself and the hook-plate is so formed that it will hold or re tain the link in a horizontal position when fitted in one draw-head only so that the outer or disengaged end of the link may enter the draw-head of an adjoining car.]

39,088 .- Stove.-Franklin Woods, Chicago, Ill .: I claim the pipes and fines, B B' G G' F F', an a a', in combination with the fire-chamber, A, t arranged and operating as and for the purpose penings, esevera

arranged and operating as and for the purpose specified. 39,089.—Method of operating Cut-off Valves of Steam Engines.—William Wright, Hartford, Conn.: I claim the combination of the pin.e, held in its relation to the face of the cam by the collar, d, and the slotted plate, b, with the toe of the lift-roc, in the manner and for the purpose substantially as set forth. 39,090. -Grain Separator.-Elijah Young, Tuscarora N. Y I clai

N. Y.: I claim, first. A sieve constructed partly of wire gauze and partly of a perforated plate, substantially as described. Second, A sieve constructed as above described, in combination with a separator, F, attached to the under side of the rear end of the sieve, said plate, F, to be either plain or perforated, fixed or adjust-able.

able." Third, The adjustable strips, H, or their equivalents for the pur-pose set for thand substantially as described. Fourth, The combination of the size, E, and the adjustable dis-charging screen, K, for the purpose set forth, when constructed and arranged substantially as described.

arranged substantially as described. 39,091.—Mode of stopping and starting Cars.—Thomas S. Bigelow (assignor to himself, Luther E. Porter & Samuel M. Rowe), Lake Mills, Wis;: I claim, first, The combination of the clutches, dd', the miter wheels, F' and E, therevolving shaft, A, and the spring, S, con-structed, arranged and operating substantially as and for the pur-pose herein delineated and set forth. Second, I claim the combination and arrangement of the miter wheels, M i, the drums, N P, chains, p p', and ratchet wheel, R, con-structed and operating as and for the purpose specified and shown. Third, I claim the arrangement of the miter wheel, E, with the adjustable sleeve, b, and the spring, S, for the purpose herein specified.

alphaante steere, v. and the option, v. the specified. Fourth, I claim the arrangement of the lever, L, and the rods, i 1 k and h, with the levers, m n, substantially as shown for the purpose of operating the clutches, d d', as specified and described. Fith, I claim the combination of the lever, D, therevolving rod, C, and the movable support, a, for the purposes herein specified and shown.

39,092.—Sewing Machine.—Reuben W. Drew, Abington, Mass., assignor to Alfred B. Ely, Newton, Mass.: I claim the application of heat by or through the flame of a lamp, gas burner, or their equivalents to wared thread sewing machines in the manner substantially as described for the purpose of warming the thread, and rendering it pliable.

the thread, and rendering it pliable.
39,093.—Grain Separator.—James Fargusson, Dubuque, Iowa, and Charles S. Burt, Dunleith, Ill., assignors to the said James Fargusson:
We claim, first, The application of a rigid or flexible support, b2, to grain riddles so that a connecting rod, J, and an eccentric G, within a closely fitting strap, f, may be arranged and employed for operating the riddles and base should be support. The application of a rigid or flexible support, b2, and concernic, G, within a closely fitting strap, f, may be arranged and employed for operating the riddles so that a connecting rod, J, and an eccentric, G, within a combinition with a rigid or flexible support. b2, an eccentric as set forth.
Third, The arrangement of the hinged devices, F F. In combination with a rigid or the riddle; all in the manner substantially as described, and so that the hinged devices, F F. In combination of the may are drived by a riddle which parts the grain at the center and with a bottomless hopper placed over the ridge of the riddle; all in the manner substantially as described.
Fourth, The combination of the many-armed bracket, L, and a fan box made with a horizontal joint and adapted to form a vertical junction with the blast spout, C, substantially sa described.
Supot4.—Crank-wrist.—C. B. Garlinghouse (assignor to the super substantial sa described.

39,094.—Crank-wrist.—C. B. Garlinghouse (assignor to himself, George B. Garlinghouse & J. Dickason), Allensville, Ind.:

Allensville, Ind.: I claim in the construction of crank-wrists the cones, b andc, adapt-ed to the pitman, E, and arranged in reference thereto, substantially in the manner and for the purpose herein shown and described.

39,095.—Water-proof Varnish for Paper, Cloth, &c.— Jonathan H. Greene, Christiansburg, Iowa, assignor to James B. Hodgskin, New York City: I claim the combination of linesed oil, india-rubber, and benzine, or some equivalent solvent, substantially as and for the purpose set forth.

39,096.—Binding Attachment for Keapers.—W. D. Harrah & H. P. Jones (assignors to themselves and Ira M. Gifford), Davenport, Iowa: We claim, first, The two arms, C D, arranged and connected to-gether as shown, in connection with the bars or gatherers, H H, for the purpose of gathering the grain in compact form for binding as berein setforth. Second, The claims, E, formed of the fixed bar, q, piroted bar, d. and catch, G, in connection with the rotary twisting arm, R, and knife, O, as and for the purpose described. Third, The combination of the gazing, Q K L M, cam, 1, and lever, N, arranged as shown for rotating the twisting arm, R, and operating the knife, O, at one operation or manipulation as set forth. Fourth, The pressure arm or lever, U, arranged as shown and in connection with thereel, S, to operate as and for the purpose herein set forth.

The object of this invention is to obtain a grain-binding device which may be attached to a reaper and operated by an attendant with the greatest facility, so as to firmly bind the sheaves with wire. Each sheaf being bound at one operation or ] with a single manipulation.]

39,097.—Signal Bell and Brake Attachment for Railroad Cars.—Dennis Harrigan, Winchester, Mass., assignor to Alfred B. Ely, Newton, Mass.: I claim in combination with the jointed arms, O P, placed on or under the roof of the car and working horizonally, the moveable bunter, T, and rigid bunter, Y, for the purpose of making a compensating attachment for a car, brake or bell rope, substantially as described.

39,098.--Apparatus for cooling Coffee.—Daniel G. Harrison & Jabez Reynolds (assignors to Harrison & Wilson), Cincinnati, Ohio :
 We claim the rotating cylinder, A, with or without the internal spiral plates, h, in combination with the elevator F, and chutes, I, one or more, all arranged for joint operation as and for the purpose herein set forth.
 [This investion address]

[This invention relates to an apparatus or device for cooling coffee after the same has been roasted by means of furnaces or the usual coffee roasting devices. The invention consists in the employment of a horizontal or a slightly inclined rotating cylinder arranged in connection with an elevator and chutes described, whereby desired end is attained.]

desired end is attained.j
39,099.— Table for Reciprocating Saws.—C. C. Hinchman (assignor to himself, J. M. Hinchman & J. R. Hinchman), Clarksboro', N. J.:
I claim, first, The table composed of the top, A, and base, B, the former having segmental plates, D, adapted to rollers on the base, and the whole being arranged and operating, and being combined with a recuprocating assw substantially as specified.
Second, In combination with the top, A, of the table and its seg-mental plates, D. I claim the plation, F. gearing in teeth formed on one of the said plates, the said plate to the same for the purpose specified. specified. Third, In combination with the adjustable top, A, of the table, I claim the graduated quadrant, M, for the purpose set forth.

39,100.—Arrangement of Valves for Steam Engines.— Green B. McDonald (assignor to himself and Dennis Long), Louisville, Ky:: I claim the arrangement relatively to each other of the valve cham-ber, C, nozzle, E, valve seat, a, valve, D, and exhaust pipe, F, sub-stantially as herein described with reference to Fig. 2.
 [This invention relates to engines with horizontal cylinders and ward to be a set of the seat of the other of the valve cham-ter of the seat of the seat of the seat of the set of the seat of the seat

nunnet vayes. Its object is to reduce the dead space in the eduction valve shambers, and thereby reduce the waste of steam between the

cylinder and the eduction valves: and it consists in a certain arrange ment of the valve chambers, valves, nozzles and exhaust pipes for this purpose.]

39,101.—Lamp.—Jacob Miller (assignor to himself and Ernest Prussing), Chicago, Ill. Ante-dated Feb. 14, 1863:

I claim, first, In combination with a wick-tube of any suitable form, a conical deflector with straight sides, of equal vertical length converging at an angle of about forty five degrees to the perpendicu-lar and an aperture at top formed with sides parallel with the top of the wick-tube, all substantially as herein set forth. Second, Supporting the said deflector adjustably upon the wick-tube by means of rods, i projecting from a flanged and slotted tube, G, fitting upon the said wick-tube with a yieldingpressure. Third, The collar, I, jointed rod, J i and champ screws, i, em-ployed in the manner described, to support a reflector, shade, or other arcicle in any desired position.

other arcicle in any desired position. 39,102.—Lamp Burner.—William Painter, Fallston, Md., assignor to Charles Painter, Owing's Mills, Md.: I claim, first, Having the side pieces, h h, and the ends, g g, con-structed and arranged in reverse inclined positions, in the manner herein shown and described. Second, The combination of the attachment above specified with the tubes, FA, the latter being screwed into the fountain or body, B, of the lamp, and enclosing the wick-adjusting wheels, b, as set forth. (This invention relates to a new and improved lamp burner for burning ceed all without the side of the avail desards to himper. The burning coal oil, without the aid of the usual draught chimney. The invention consists in having the wick-tube of the burner fitted in a tube which is screwed into the fountain or body of the lamp, said tube having the wick-adjusting mechanism within it, and a tubular slide fitted upon and extending above it, said slide having its upper end of flaring form, perforated and provided with a flame spreader and regulator, all being constructed and arranged in such a manner as to

cause a clear, white and persistent flame void of smoke or odor.]

39,103.—Ruffle.—Abby H. Price (assignor to the Magic Ruffle Company), New York City: I claim the within-described corded ruffle as a new article of manu-facture, the same being formed of a gathered strip, A, attached to a folded binding, B, or lis equivalent by a single series of machine stitches, D, with a cord C, enclosed substantially in the manner and for the purpose herein set forth.

39,104.—Boot and Shoe Last.—Benjamin L. White (assignor to himself and A. Nutting), Westford, Mass.: 1 claim the employment of the india-rubber or elastic peg-strips. E. in combination with the inclined grooves, a', plates, D, formed as shown, and the last, A, all in the manner and for the purpose herein shown and described.

[This invention consists in having the body of the last constructed of wood and provided at its sides adjoining its bottom with metal plates, metal plates being also secured on the bottom of the last at the toe and heel, and strips of india-rubber or other suitable or similar material inserted in the bottom of the last.]

39.105 .- Nail Plate-feeder. John S. Fisk, Youngstown.

Ohio: I claim, first, Retracting the nail plate preparatory to turning the same, by means of one or more cams, ol os, and a lever, V, and af-terward restoring it by means of a spring, p', all substantially as de-scribed.

terward restoring it by means of a spring, p', all substantially as de-scribed. Second, The combination of one or more cams, o2 o5, lever, S, and rod, R, for raising the plate substantially as described. Third, The rocking box, R', employed in the described combination with the plate rod, P, and elevating rod, R. Fourth, The combination of the lever, T, rack, u, and pinion, u', or their described equivalents, for inverting the plate. Fifth, The hinged nut, F, employed in the described combination with the endless screw, D, and carriage, C, to advance the latter and permit its retraction. Sixth, The combination of the levers, H G', rod, J, spring catch, I, stationary cam, X, and spring, j, operating substantially as and for the purpose set forth.

39,106.—Riding Spurs.—A. H. Langholz, Chicago, Ill.: I claim the curved plate, A, arranged with its spring, C, pin, D, and slot, E, in combination with the forked and notched ends of the stay, II, forming a movable spur.

#### RE-ISSUES.

1,504.—Apparatus for making Water Gas.—W. H. Gwynne, White Plains, N. Y. Patented March 11, 1862: I claim the distributing box, B, with its circulating and heating passage, D, and its perforated cover or top. C, the whole operating substantially as herein described and shown for the purpose set forth.

substantially as herein described and shown for the purpose set forth.
1,505.—Process of making Water Gas.—W. H. Gwynne, White Plains, N. Y. Patented March 11, 1862:
I claim the within described mode of obtaining a more uniform mixture of gases eliminated from coal and water, or their equiva-lents, in separate retorts, by supplying, the hydro-carbon gas retort with gases eliminated from vapor of water in a separate retort by passing steam super-heated to about the temperature of the fincan-descent decomposing material in a finely divided state through the mass of said decomposing material, substantially as and for the pur-poses set forth.

mass of said decomposing material, substantially as and for the purposes set forth. 1,506.—Stove.—Joseph C. Henderson, Albany, N. Y. Patented May 29, 1860 : I claim, first, A reservoir or hopper constructed at its lower end to contain and supply riel, in combination with a fire-pot, separate from said reservoir, and to which the coal is supplied at or near the center, so that the products of combustion pass away from the sur-face of the fire around the contracted base of the said hopper sub-stantially as specified. Second, I claim a chamber or horizontal flue around the base of the reservoir or hopper, supplying coal, and over the surface of the fire, to receive and detain the products of combustion parts and the the fire here or horizontal flue, formed as aforesaid, to prevent a too rapid es-cape of the products of consumed as set forth. Third, I claim the surrounding case, b, in combination with the products of combustion as specified. For the products of rom the said chamber and hopper, fire-pot, and chamber above the fire, a circulat-ing current of air surrounding case, b, in combination with the said hopper, substantially as specified. Sixth, I claim in combination with a hopper over the fire, a circulat-ing current of air surrounding current of air passing through the hollow lower end of the supply hopper and entering the combustion with the hopper, e, and draft space, g, as set forth. Seventh, I claim the circulating current of air passing through the hollow lower end of the supply hopper and entering the combustion with the hopper, e, and draft space, g, as set forth. Seventh, I claim the surrounding current of air passing through the hollow lower end of the supply hopper and entering the combustion with the hopper, e, william H. Lyman, Newark, N. J. Pattented Anvil 15, 10-82 .

1,507.—Whip-socket.—William H. Lyman, Newark, N. J. Patched April 15, 18.56: I claim the application to a whip-socket. A, of an elastic disk, B, provided with a bole, a, substantially in the manner and for the pur-pose herein shown and described.

[This invention consists in the application to the upper part or mouth of a whip-socket, of a disk of india-rubber or other elastic fiexible material, said disk being stretched across the mouth or open-ng of the whip-socket and provided with an opening smaller than the diameter of the whip-handle in such a manner that when said whip-handle is piaced into the socket the opening in the elastic disk closes up firmly all round and prevents dirt, dust, or other foreign substances from entering into the whip-socket and soiling the handle]

1,508.—Construction of Wheeled Vehicles.—Oren E. Miles, Aurora, Ill. Patented Feb. 5, 1862: I claim, first, In wheel vehicles the arrangement of the rotating arm, C, and the wheel, hub or center, B, the latter being fitted within the other and confined and released by the bolt, c, or its equivalent, substantially in the manner and for the purpose herein set forth.

Second, I claim in wheel vehicles the arrangement of the bolster, A, truss rods, f, center frame or pari, G, ourer bearing frames, E, or its equival-nt and a rotating arm. G, carrying a wheel righty con-nected, substantially as and for the purpose herein set forth. Third, I claim in wheel v-hicks having a rotating arm. G, righty concected with the wheel, B, the within described and represented ar-rangement of the springs, and h, and guiding pin, i, relatively to the bonster, A, hole, j, and box. D, or their equivalents for the pur-pose set forth. Fourth, I claim in wheel vehicles the within-described arrangement of the rotating arm, G, parts, k K, and trunnions, 11, relatively to the levers, r, frame, m, and block, G, or their respective equivalents for the purpose above set forth.

#### DESIGNS.

2.—Plate of a Stove.—John D. Flansburgh (assignor to North, Chase & North), Philadelphia, Pa. 1.792.

1,793, 1.794, 1.795.—Cook's Stove (3 cases.)—Garrettson Smith & Henry Brown (assignors to North, Chase & North), Philadelphia, Pa.

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2 Car

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